

Manufacturers Record

Exponent of America



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Boston University
Business Administration
525 Boylston St.
Boston 17, Mass.

Coming Events and Some Present Achievements.

There are some great outstanding questions pertaining to the material welfare of the South, but bearing at the same time upon the welfare of the entire country, which will be covered so fully in early issues of the *Manufacturers Record* that we feel justified in calling particular attention to them.

The hydro-electric development of the central South is one of the outstanding features of the wonderful industrial advance of that section destined to have a very marked effect upon agriculture as well, for the tendency is to carry this hydro-electric power to the farms and villages, and thus help to decentralize industrial progress and at the same time to add to the advancement of agriculture.

The whole hydro-electric subject will be covered in two remarkable articles, detailing what has been done, how it has been accomplished, and the future hydro-electric possibilities of the South, by Dr. Thorndike Saville, long recognized as one of the leading authorities of the South on the subject. The publication of these articles, with an elaborate map showing the present hydro-electric developments and the transmission lines in the South, will begin within the next few weeks.

The extension of highway building is commanding nation-wide attention. Upon it depends the progress of the farm and the factory alike. We have only begun our highway construction in comparison with what must be done. Highway building is so intimately identified with the prosperity which has been created by the automobile and the motor-truck and that still greater prosperity which will come from an expansion of the automobile, the motortruck and motorbus, through the building of good highways, that too much attention cannot be given to the subject. It should be studied by every man and woman interested in the advancement of the material, the educational and the spiritual things of the country at large.

For some years it has been our custom to publish a Good Roads special edition as our first issue in January. These issues have commanded the attention of everybody interested in highways as engineers, builders, promoters and students of the situation throughout the country. The Good Roads issue, which will be published on January 6, will be exceptionally valuable. It will cover many phases of road building. It will show what has been done and what is now under way. No one interested in the study of this great question, whether as an active worker in the building of roads, as an engineer, contractor, or as a student of human affairs, can miss that issue without a serious loss to his knowledge of highway building and all that it means. Other matters of almost equal importance will be covered within the next few weeks, and we feel safe in saying that we are offering to our readers a treat of inspiration and information which they cannot find anywhere else.

Leading Eastern bankers who recently made a personal study of hydro-electric operations in the central South were deeply impressed with the future of this section. Their letters published today, and a full description of the largest artificial lake in America, covering 40,000 acres in Alabama, built in the course of hydro-electric developments, add to the interest of this issue.

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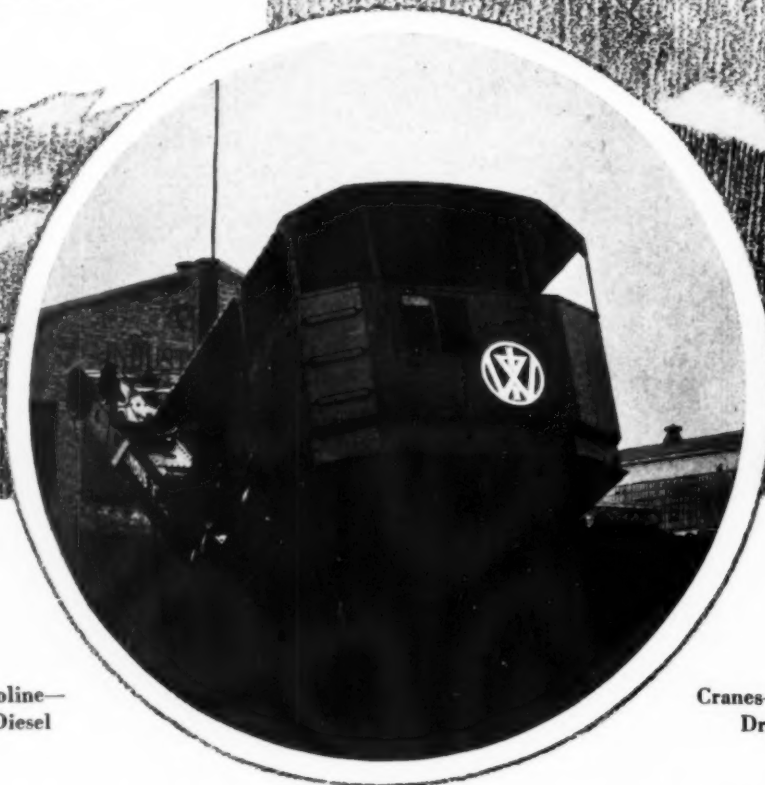
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Table of Contents

Baltimore, Md., December 9, 1926

Coming Events and Some Present Achievements.....Cover Page

EDITORIALS

Congressman Huddleston Discusses Power of Interstate Commerce Commission to Permit Railroads to Make Special Passenger Rates for Investigators.....	57
Why Great Industries Turn to the South.....	58
The Cause of Widespread Criminality and the Only Cure.....	59
Secretary Hoover and the Cotton and Rubber Situation.....	60
The Divine Command, "Subdue the Earth," Being Fulfilled.....	61
The South the Greatest Labor Market in the United States.....	62
Prohibition a Failure? Nonsense!.....	62
Alabama Wisely Considering \$25,000,000 Bond Issue for Good Roads.....	63
The Florida East Coast Railroad's Big Construction Work.....	63
Weather Conditions in the North and West in Contrast With the South.....	64
Don't Write It "Xmas".....	64
Plan of Business Men to Investigate Farm Conditions Should Meet Commendation of Farmers.....	65
Is the Federal Government Morally Liable for Bonds Issued by Certain States When Under Its Control?.....	66

NEWS ARTICLES

Eastern Bankers See Great Industrial Opportunity in the South.....	67-69
Martin Lake, Alabama, the Greatest Artificial Lake in America By Richard Woods Edmonds	70
Diatomaceous Earth Discovered in Quantity Near Augusta, Ga... ..By N. L. Willett	72
Tacna Arica—Secretary Kellogg's Happy Proposals.....By Courtenay De Kalb	73
\$500,000,000 in Motor-Vehicle Revenues for 1926.....	74
Power and Mechanical Show Typifies American Ingenuity and Industry.....	75
Ice-Cream Manufacturing Now an Important Southern Industry..By John M. Gibson	78
Refrigerating Units for Concentrating Plants. Number 4.....By George Garner	81
J. M. Keynes Suggests Plan for English Cotton Industry..By Frederick W. Tattersall	83
English Views on the Cotton Situation and How to Stabilize Cotton Prices.....	84
"Back to Earth," Florida's New Dream of Progress.....By W. Breckenridge Estes	87
Mr. Schwab Predicts World's Greatest Steel Plant in Baltimore.....	90
An Old Town Takes on New Life.....By Robert W. Brock	91
The Forests and the South. Number II.....By Carl Wernicke	93
To Develop East Coast of Florida.....	95

DEPARTMENTS

News and Views From Our Readers.....	97	Mechanical	103
The Iron and Steel Situation.....	98	Construction	105
Railroads	99	Industrial News of Interest.....	123
Good Roads and Streets.....	102	Financial News.....	126
Textile	103	Trade Literature.....	128

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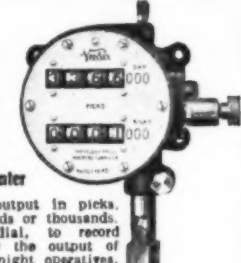
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BALTIMORE, DECEMBER 9, 1926.

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Congressman Huddleston Discusses Power of Interstate Commerce Commission to Permit Railroads to Make Special Passenger Rates for Investigators.

House of Representatives.

Washington, November 23.

Editor Manufacturers Record:

I have received reprint of the article "Railroads No Longer Allowed to Carry Investors and Investigators Free," appearing in the MANUFACTURERS RECORD of November 20, and have read it attentively.

The article advocates a return to the free-pass system for the purpose of enabling railroads to transport without charge prospective investors and homeseekers into territory which they serve.

The recent instance of the transportation of Queen Marie and her party across the continent and back for a merely nominal charge shows that the Interstate Commerce Commission has wide powers on the subject and may authorize railroads to make party, club and excursion rates practically without limit. It seems obvious that there is nothing in existing law which would prevent railroads from carrying investigating parties or homeseeking passengers generally for fares which would be purely nominal. It does prevent arbitrary discriminations and preferences among individuals as such.

The chief evil of the free-pass system was that it enabled the railroads to discriminate arbitrarily among their patrons, to reward friends and punish enemies, to seduce public officials through favors to themselves and friends, and in practical effect to give rebates, and so on. When the anti-pass law was enacted this evil had grown so great as to be practically intolerable. It is rather startling that anyone should now advocate a return to the system.

The theory of the Transportation Act of 1920 (Esch-Cummins Act) is that railroads should be allowed to charge for their services sufficient to yield in the aggregate above all expenses a net return, 5.75 per cent, on the value of their property. This means that railroads are permitted to levy a sufficient tax on those whom they serve to keep the hopper full, and that whatever they may fail to collect from one patron may be exacted from others. Under this theory, all favors, special rates, passes, etc., granted by railroads cost their stockholders nothing, but are at the expense of those whom they serve. The free passes, which railroad officials might issue for the purpose of influencing public officers or to gain some unfair advantage for the company or for the personal benefit of directors and general managers, would be paid for in full by the paying passengers and shippers. Those who do not approve this theory have no excuse for supporting the Act.

A public utility, though it may be under private ownership and control, performs a public function. It should be sub-

ject to public regulation. The public is interested in every detail of its business. All charges should be fixed to yield a fair net return—none should be higher and none should be lower. No favors, no gifts, no campaign contributions, no special advantages, no discriminations of any kind should be tolerated. That there might be cases in which the business and profits of the carrier would be increased by passes must be admitted. That might be said even of rebates. But possibilities of graft, corruption, subornation and the many other abuses of a free-pass system require that all passes should be forbidden. We should go a step further than the present law and forbid the issuance of passes to railroad lawyers, doctors and employes and their families and friends. Let the carriers pay in money for the services rendered and honor actual expense accounts when on company business.

GEORGE HUDDLESTON, M. C.

The MANUFACTURERS RECORD fully appreciates the evil to which the free-pass system was carried and it is glad that system was abolished by the work of the railroads themselves in appealing to Congress, though the public at large was under the impression that this was a move of Congress and not of the railroads.

We do not believe in the free-pass system which formerly prevailed and would not have it restored. The MANUFACTURERS RECORD, although it keeps many of its representatives traveling throughout the country, far prefers to pay their railroad expenses than to have free passes for them.

Under the old system the public would scarcely believe that the pass system did not influence the views of the newspapers on railroad matters, and doubtless in some cases this attitude of the public was justified.

We are inclined to agree with Mr. Huddleston that railroad employes and their families should pay exactly as other people do when traveling on railroads with which they are connected. As it is now, practically every railroad employe, in addition to the salary he gets, receives the benefit for himself and his family of free passes—a privilege not granted to the public at large.

However, the article which has called forth Congressman Huddleston's reply was based on a letter from Guy M. Walker of New York, calling attention to the fact that railroads could no longer carry without charge prospective investors and investigators, and thus were deprived of the opportunity of doing many things of this kind which they did before to the good of the South and to the railroads themselves, before the free-pass system was abolished. Mr. Huddleston's statement on this point, based on the Interstate Commerce Commission's power to permit special rates, is very interesting.

WHY GREAT INDUSTRIES TURN TO THE SOUTH.

A NOTHER step forward in the South's advance to a point of industrial supremacy is promised by Charles M. Schwab in an announcement that he proposes to make the Baltimore plant of the Bethlehem Steel Company at Sparrows Point "the greatest plant of its kind in the world—greater even than Pittsburgh." The announcement was made to 750 members and guests of the Baltimore Association of Commerce, each of whom accepted it as a 100 per cent promise, endorsed by the actual expansion of the Baltimore plant in the last ten years.

Ten years ago, said Mr. Schwab at a recent banquet in his honor, he had dreamed of a monster plant in Baltimore and had dazzled Mayor Preston with the vision. Since then the company has spent \$50,000,000 on the progressive development of the plant. His first dream having come true, Mr. Schwab has seen another vision, and his expressed hope is to live to see it translated into tangible actuality.

Furthermore, his company will invest still more millions in the Baltimore dry dock and shipbuilding yards, and in time it is possible this plant, too, may become the leader in that branch of industry.

Mr. Schwab is of those who dream dreams and then work to make those dreams come true. The practical nature of his visions and his success in his labors are proved in the history of the Bethlehem Steel Company. "When we bought the Bethlehem Steel Company, 23 years ago, it was worth one-half of the \$15,000,000 we paid for it; now its value is \$600,000,000," said Mr. Schwab at the Baltimore banquet. Indeed, the Baltimore plant alone is worth several times the sum paid originally for the entire concern.

Baltimore and the South owe much to Mr. Schwab, primarily for that faith in them which induced him to select Baltimore as the site for his greatest enterprise. But the obligation is by no means one-sided. In the South, as represented in this case by Baltimore, Mr. Schwab and other practical "dreamers" find attractions and advantages not obtainable in any other part of the world. They find an honest, co-operative business welcome, fine sites for their industries and unexcelled water, rail and truck transportation facilities. They find the safest and best equipped harbors and ports in the land. They find reasonable, efficient and conscientious American labor, untarnished by foreign radicalism and free from the oppressive dictation of self-seeking organized labor leaders. They find geographical advantages which give them cheaper freight rates, because of shorter rail hauls, than for many less favored ports. They find fine homes for their employes and delightful residences for the higher officials. In short, they find more attractions and fewer handicaps than any other section of the country can offer. The obligation, if any, is by no means on one side.

The promise by Mr. Schwab that the South shall be the site of "the greatest steel plant in the world" should be effective in twofold measure: First, to stimulate the South and the industries already there located to greater effort and expansion; second, it will serve greatly to attract other great industries to the South. If such concerns as the Bethlehem Steel Company, for one, find the South the best section in which to settle, men may argue, it must, indeed, have advantages which business acumen will not permit to be ignored.

And, reciprocally, the South must make these advantages known to all the world and must give 100 per cent in honest treatment for the faith which is reposed in it by the newcomers. And all who know the South are confident it will do so.

There is just one more thing for Mr. Schwab to do to round out his great life work as a builder of vast steel plants, and

that is to establish a big plant in the central South, say in Birmingham or the Chattanooga district. The South is destined to be the greatest industrial region in America and that fact is becoming more and more clearly recognized by the foremost financiers and industrial leaders of America. Mr. Schwab's company has great steel plants in various parts of the East, but we do not believe he or his company can afford for the future to remain out of the central South. The Steel Corporation found it necessary to go into the South, and we strongly urge Mr. Schwab to do likewise. Then, indeed, will he have rounded out a gigantic steel combination, for if he fails to do this, he will fail to get a fair share of the gigantic iron and steel business which is developing in that section.

RAPID RISE OF FRANCS DISTURBS BUSINESS INTERESTS OF FRANCE.

A DISPATCH from Paris reports that the rapid and somewhat sensational rise of francs has caused consternation among business interests who fear the result will be a great depression of business, throwing thousands of people out of employment. While France has had great difficulty in meeting its financial problems, the industrial development of the country has gone on rapidly and France has had to draw heavily upon surrounding countries, especially Italy, for a sufficient number of workmen to handle the volume of business available.

The French people have doubtless watched with interest and some alarm the severe depression in Great Britain ever since the deflation policy in that country resulted in bringing about greater unemployment than England had ever before known, and, therefore, the business interests of France are wondering whether in trying to advance the price of francs the Government will not at the same time bring on general business and industrial depression. This is a sidelight upon financial affairs which needs to be studied by the world.

A WORLD LANGUAGE.

IN a letter to the MANUFACTURERS RECORD, referring to an article published in this paper some months ago in regard to a world language, Guy M. Walker of New York writes as follows:

"I was so ill during the month of July that I was unable to read anything, and only today I went through the copies of the MANUFACTURERS RECORD that accumulated during July and August. Among other things I find an article by Arthur Elliot Sproul on a world language which made me smile, for back in 1919 I wrote an article for publication in China, where it was originally published, on the subject of a world language to prevent the Chinese Government from sending a number of students to France. It was not only translated into Chinese and published in the Chinese press in Canton, Shanghai and Peking, but was also published in English in the English press of Shanghai, which circulated throughout China. It was afterward translated into German and published in Germany, where they are now devoting two hours a day in all the public schools to the study of English. While I do not know anything about it, it is altogether probable that, since it was published in Chinese, it was republished in the Japanese press. At any rate, yesterday's papers had an interesting account of the meeting in Tokyo of the Pan-Pacific Scientific Association with 600 delegates, and, in spite of the protests of some of the native Japanese scientists, English was adopted as the language of the convention, as it was the only language understood by practically every delegate, no matter from what country he came."

The Cause of Widespread Criminality and the Only Cure.

IN Illinois gangsters are using airplanes and machine guns to carry on their campaign of murder, dynamiters in Pennsylvania and elsewhere are at work to destroy their enemies or to wreck bank buildings, highwaymen are murdering right and left wherever they can rob. Is it not time for this country to take account of itself and for thoughtful men to realize that lawlessness is increasing to an extent that no man's life or property is safe?

The murderer shoots down the pay clerk, without giving him a chance for his life, merely to grab the money, and rarely is the murderer caught. Gangsters everywhere are killing men merely for the purpose of robbery, and killing other gangsters who interfere with their plans. Corporations and bankers now fear to send money on the streets of even the best governed cities except in armored cars, and insurance against bank robbery and insurance of payrolls has become a matter of necessity. And yet our people seem indifferent to the situation and go on their way without realizing that it is incumbent upon every man and woman in the land to help meet this appalling condition.

For years the *MANUFACTURERS RECORD* has pointed out the inevitable development of this spirit of lawlessness, encouraged by the lawless acts of men of affairs who, whenever it suits their convenience, violate one law or another merely because they do not believe in that particular law. The banker who violates the Prohibition law, for instance, has no right to criticize the murderer who kills the clerks in his bank and dynamites the building and escapes with the money. He has set that man an example, and in proportion to his position in life and his responsibility the banker is just as guilty as the criminal who robbed the bank and in doing so murdered some of its people.

Men of position, socially or financially; professional men and others who, because they do not believe in the Prohibition law or in some other law, constantly violate it or permit its violation by their friends without protest are responsible for much of the criminality that spreads through the country to such an alarming extent that no man's life is safe on the highways or in the streets of a city or even in his own home.

Harsh as this language may seem to some of our readers, it is nevertheless true. This nation wrote into its Constitution by Constitutional methods the Prohibition law. The man who violates that law out of a spirit of hatred to the law or a desire to show his independence of law is responsible to the extent of his influence for all the country's criminality which endangers our very civilization.

It is not a question of Prohibition or of liquor. As a nation we could exist even if Prohibition were wiped off our statute books; but, thank God, we believe that never will be. But we cannot live as a nation with a development of lawlessness which makes life and property so unsafe that no one knows when he may face the highwayman's pistol or the machine gun or the dynamite bomb or other weapons of murder. The daily papers are filled day after day with stories of criminality which cannot be duplicated elsewhere in all the world. There is no other country on the face of the earth where lawlessness exists to such an extent as in the United States. Judges and juries in many cases are failing to do their duty. Juries, instead of upholding the law of the country, often

violate it openly and permit the escape of criminals. Some judges are so lenient in their sentences that they practically put a premium upon crime. But, to their everlasting honor, there are some judges in the land who face the situation and realize that the criminal is a criminal, and that obedience to law must be upheld if the nation is to live.

We are so busy in our business, so absorbed as a people in our pleasures or our activities, so concentrated in the desire to make money that we often forget the responsibility which as individuals we are under to safeguard the nation from destruction by criminality.

It is universally admitted that the bootlegger is a violator of the law and is, therefore, a criminal before the law, but it is not so universally conceded that the bootlegger's business is made possible only because other men are violating the law by buying the bootlegger's whisky. The buyer of the bootleg whisky, as a copartner with the bootlegger, makes his business a possibility and, therefore, is actually a copartner and practically upholds all of the activities of the bootlegger even when they run to murder itself.

The rumrunners along our coast are a desperate gang of criminals, who, in effect, are really pirates, and should be treated as pirates of the high seas. These men are openly defying the power of the United States Government. They are saying that they will defy the Government, trample the flag of the country in the mire and laugh at those who attempt to prevent their piracy. Every man engaged in this direct piratical work against the National Government should be treated as a pirate, with no more mercy shown than that given to the pirates of olden days.

The Postoffice Department regards the mails as so sacred that it has called upon the marines, as it did once before, to arm mail cars and to shoot to kill any man who is apparently endeavoring to rob a mail car. The provision is wise if the marines are sufficiently careful to be certain they are not shooting innocent men. But are the mails more sacred than the Constitution of the United States? Tens of thousands of men on land and on the high seas are defying the Constitution, breaking our laws, doing all in their power to destroy our Government, and that is far more than the mail robber is doing. But we sit down supinely, and the Treasury Department, having the Prohibition laws in charge, makes no effort to follow the wise example of the Postoffice Department and tell the marines and the Coast Guard Service to shoot to kill every man who is attempting as a rumrunner on the high seas to destroy our Government and bring our nation into chaos.

Let us in considering this question forget entirely the matter of Prohibition or non-Prohibition, and simply consider it from the viewpoint that the violation of law must be suppressed if it takes the entire force of the Army, the Navy and the marines to do it. And until our people awaken to a realization of this fact we are headed in the wrong direction, and no man can foretell how soon destruction may come. Every individual who is violating law is himself a law-breaker and a conspirator and coworker with all of the criminal activities of the country, and no subterfuge of argument by which he seeks to justify himself to his own conscience is worthy of a moment's consideration.

Obedience to law is a fundamental factor in the safety of this country, and if we do not obey law we may rest assured that the time will come when criminality will so completely sweep over the land that no life and no property will be safe from destruction.

SECRETARY HOOVER AND THE COTTON AND RUBBER SITUATION.

Department of Commerce,

Office of the Secretary.

Washington, November 27.

Editor Manufacturers Record:

Your editorial of recent date criticising Mr. Hoover for supposed inconsistency between his support to the voluntary effort of the Southern cotton growers to reduce their overproduction of cotton as against his conservation campaign of a year ago to reduce the price of rubber which had been imposed by British Government price-fixing control, appears to be based on misconception of the facts.

In various public statements of the Department of Commerce and the Secretary it has been repeatedly pointed out:

(a) That the cost per pound of growing rubber and cotton is almost identical, 13 to 18 cents per pound, and, therefore, reasonable returns to the growers should be approximately the same at some figure above these costs.

(b) That there is no overproduction of rubber; in fact, there is an artificial famine created by the Government control in order to fix prices. When that control was established in 1922 it was declared that it would maintain a fair price of 32 to 35 cents a pound. During a period of over two years while prices ranged around this level, the Department of Commerce made no comment other than that it considered that foreign Governmental price fixing for our raw materials would lead to great dangers in international and trade relations. The Department has repeatedly stated that while it objected to price fixing in principle, it recommended no defensive action, except against unreasonable price to American consumers. That foreign price fixing was their business if they wish to do so.

(c) In November last year, however, prices of rubber were advanced to over a dollar a pound. As the United States imports 900,000,000 pounds annually, these prices imposed a penalty at the rate of upward of \$600,000,000 annually on the American people over and above even the so-called fair price. As an artificial famine had been created, Mr. Hoover supported a conservation campaign to reduce the consumption to somewhere near the measure of supply permitted under the control. The result was to reduce the price to 40 cents a pound, an enormous saving to the American people.

(d) Although as a matter of equitable exchange it might be contended that the American cotton grower is entitled to the same price as rubber, our growers have never aspired even to the so-called fair price for rubber and there is no Governmental price fixing in the Southern cotton programs of action. There are no proposals to create artificial famines and stifle world consumption. If such a thing did take place in cotton, the complaints of the world would be a thousand times greater than those which our patient people made over unreasonable prices in rubber.

For further information on this subject permit me to refer you to the Report of the Secretary of Commerce (pages 34 to 40), a copy of which is attached.

GEORGE AKERSON, Assistant to Mr. Hoover.

The MANUFACTURERS RECORD is glad to have the opportunity of publishing this statement from Mr. Akerson, assistant to Mr. Hoover. The editorial to which exception is taken was not based on any misconception of Mr. Hoover's position, but was based on the belief that it would be embarrassing to Mr. Hoover to be a member of a committee which, if it carried out the wishes of Southern cotton growers, would work specifically for the reduction of cotton acreage, and thus the reduction of the crop, and for an increase in price. As Mr. Hoover had made such a vigorous fight against the action of the British Government in regard to rubber, we felt that he would lay himself open to the criticism of foreign consumers of cotton if he was a member of a committee formed for the purpose of reducing the crop and increasing the price.

The suggestion, therefore, was made from no ill will or criticism whatever of Mr. Hoover, but to save him from what looked to us like an embarrassing position to hold, and one which, in our opinion, would be open to attack from Europe.

It is true that there is no Governmental price fixing in the

Southern cotton program of action, but there is a definite idea on the part of Southern cotton growers that if they had the power they would force a control of the cotton market to as high a price as rubber has commanded. No one need question for a moment that Southern cotton growers and Southern cotton people generally would rejoice in holding a dominating power, by individual or Governmental control, by which they could put the price of cotton to 40 cents or 50 cents a pound.

We have often had occasion to criticise very severely the action of a warm friend of the MANUFACTURERS RECORD, Sir Charles Macara of Manchester, who many years ago organized an International Cotton Spinners' Association for the express purpose of reducing the consumption of cotton during a famine period in order to break down the price. Sir Charles has been one of the great factors in the cotton trade of England. With many of his views we are in entire sympathy, but we very vigorously opposed every effort that he has made, so far as we know, to use the power of that international organization for the purpose of breaking the price of cotton. He has often boasted that he saved foreign consumers an enormous amount of money by being able to carry out his plan of lessening cotton consumption, and thus breaking the price in a period of cotton scarcity. Many of his acts have been aimed especially at cotton speculators, claiming that they were responsible for the higher prices which prevailed, when as a matter of fact it was the scarcity of the supply which enabled the speculators to put a higher price on the cotton than it had formerly commanded.

Mr. Akerson is incorrect in his statement that American cotton growers have never aspired to the so-called fair price for rubber. Not only have they aspired to that price, but leaders in the cotton trade have repeatedly, year after year, urged that cotton should always command a price equal to the so-called fair price for rubber, and many have advocated that instead of being raised to 40 cents a pound, cotton should command 50 cents. With these extreme views the MANUFACTURERS RECORD does not agree.

The arguments put forth by Mr. Hoover against an advance in the price of rubber in November of last year are in exact harmony with the arguments advanced by leading English spinners for the last century against a profitable price to the cotton growers of the South; and they have often referred to the enormous drain upon England in paying a higher price for cotton in years when it would bring a price somewhat above a starvation basis for the cotton growers.

With full appreciation of the great work that Secretary Hoover has done, we still feel that membership on President Coolidge's cotton committee is not wise from his own standpoint. It opens him to criticism from the people who are always fighting against fair prices for cotton, and it would necessarily cause the cotton people of the South to believe that Mr. Hoover would not use the utmost power of his position to bring about a profitable price for Southern cotton. It is for these reasons that we thought he would be embarrassed by being on that committee, and we still hold to that view, though we are very glad to have his assistant's statement of Mr. Hoover's position in the matter.

AN ARKANSAS BANKER'S VIEW.

J. C. CONWAY, vice-president and secretary, American Southern Trust Company, Little Rock, Ark., writes:

"Your words of encouragement are an inspiration to us to continue to bring to the attention of the world the resources of this great state. We feel quite complimented to have had your splendid magazine take cognizance of our efforts. The MANUFACTURERS RECORD is read with much interest in our office, and we have long recognized the wonderful work you are doing for the South."

THE DIVINE COMMAND, "SUBDUE THE EARTH," BEING FULFILLED.

THE Boston Evening Transcript editorially tells a very interesting story of how an important advertisement of a bond sale by a Pacific Coast corporation was handled by telephotography. At the last moment it was learned that the copy which had been forwarded to Eastern papers did not cover the full story that the bankers desired should appear in connection with this bond sale, but as it had been announced to appear on a certain day the emergency was met by Doremus & Co., the advertising agents, who made use of the American Telephone and Telegraph Company's new service of transmission by telephotography. Accordingly, complete copy was sent over the wires, embodying not only the revised text exactly as it was desired it should appear, but also with marginal notes in pen and ink giving precise instruction for style and size of type to be used.

From this transmission, conveying to the office of the Transcript and other Eastern papers from San Francisco a perfect photograph of the desired result, it was a simple matter for the composing rooms of these papers to set the copy in exact accordance with instructions and just like any other piece of financial advertising.

The entire cost of the transmission if it had been confined to one paper would have been about \$50, but as other cities had to be "hooked up" there was an additional charge of \$5 for each city, so that the whole cost of its transmission to Boston, New York and Chicago was only \$60.

That telephotography has reached a point where it can convey, as it did in this case, a complete picture of the matter dispatched is one of the most marvelous things of these marvelous days.

In the first chapter of Genesis man was commanded to "subdue the earth." Surely this divine command is finding a fulfillment in the way in which men everywhere are subduing all the forces of nature, and bringing them all into the service of mankind. Since man first learned to speak his voice has gone out into the air, but not until the telephone was invented could his voice be heard beyond a distance of a few yards, and now the radio carries it almost around the earth, and the voices that are in the air are being caught here, there and everywhere, and the messages which come in some unaccountable way, however much the scientists may think they have solved the problem, merely show that we are still only at the threshold of understanding the radio; we cannot comprehend all of its marvels any more than we can understand what electricity really is.

Nearly half a century ago Marie Corelli in one of her daring romances undertook to forecast the things that electricity would some day do; many of these are now being fulfilled. And she even dared to assume that the departing soul as it left its earthly tenement would be drawn on its way to its heavenly home by the light of electricity which emanated from the Throne of God.

In chemistry, in scientific research of every kind, in the radio and in the telephotograph, in the wireless and in many other things mankind is but carrying out the command of the Creator to "subdue the earth." How far these inventions and discoveries are to go no man can foretell. To what end they are leading is beyond the power of the human mind to grasp.

As suggestive of what the radio is doing, the writer in his winter home in Florida once heard the Montreal station send out a call to the Baffins Bay stations of the Hudson Bay Company to the effect that the Hudson Bay relief ship had that season failed to reach one of the outlying posts. Every station on Baffins Bay was urged to make special effort to carry supplies to the missing station to save the people there from want. Within a few days of that message the writer, though 1500 miles away from Pittsburgh, "listened in" on

the annual dinner of Westinghouse employees and heard with the utmost distinctness every speech made, that night happening to be free from static, and every word was almost as distinct as if we had been sitting in the room in which the banquet was held.

During the same season 20,000 alumni of the Massachusetts Institute of Technology sat around their banquet tables in 67 different cities scattered all over the country. Arrangements had been made so that all the people of these 67 cities could hear the speeches delivered and follow the entire program from a central point in the East.

Who can measure the fathomless depths of such mysteries, such marvels of human achievements, such revelations we believe as Divinity is giving to mankind by permitting men of scientific ability to bring into play for the benefit of the world these marvelous achievements? And yet it would seem that all that has been done is but a harbinger of the still greater victories to be won.

UPHOLDS THE BANKERS.

C. M. Garland & Co.,

Consulting and Construction Engineers.

Chicago, November 22.

Editor Manufacturers Record:

I have been looking over your article, "American Bankers Reported As Unwilling to Finance New Enterprises," and I am decidedly with the bankers.

In my opinion, it is little short of criminal for bankers or brokers to put up money on new enterprises that have never shown an earning, and then unload the securities onto the public. Obviously, a bank, whose principal business is the loaning of money at small interest rates, is not in a position to assume the losses almost invariably incurred by new enterprises.

After about twenty years' experience in industrial work it seems to me that at least 75 per cent of all new enterprises fail. At least they suffer many losses before they are on a paying basis. This is invariably due to lack of experience on the part of promoters and lack of proper organization for manufacture and sales.

Andrew Carnegie said, "Take my money or my plants or my equipment and I will come back, but take my men and I am through," or something to this effect, and this explains to anyone who has had experience in industrial enterprises why a new enterprise is the most dangerous thing in the world from a financial standpoint.

If Mr. Lindsey or anyone else has an idea that is sound and will show real profits on ultimate analysis, there is always plenty of private capital, and by private capital I mean men of large means who are willing to undertake this kind of thing; and this is as it should be. After the enterprise is developed, and on a paying basis, then is the time for the banker and the broker to finance its larger development.

A new enterprise is the worst kind of speculation, and for bankers to finance enterprises of this kind and unload the securities onto the public in the guise of investments is a fraud.

In my experience, when a man in Mr. Lindsey's position writes in this manner, he has something that he knows a good business man would not support, or at least would not support and permit him to retain the control. He, therefore, wants the public to finance the proposition and hold the bag, while he holds the control. This kind of thing has gone entirely too far, and it is very fortunate the bankers are taking the stand that they are.

It would not take me or any other man familiar with the financing of industrial enterprises more than a few minutes to cite cases where the public had been mulcted out of \$15,000,000 or \$20,000,000 in exactly the manner you are advocating.

C. M. GARLAND.

We think Mr. Garland has misinterpreted the meaning of the letter of Mr. Lindsey to which he refers. Neither Mr. Lindsey nor the MANUFACTURERS RECORD had any thought of suggesting that bankers should handle enterprises which are not entirely safe and sound, but there are a great many enterprises worthy of the most careful investigation on the part

of conservative banking houses which might be financed to the advantage of the bankers and the country at large.

If Mr. Garland had been familiar with the business standing of Mr. Lindsey, he would hardly have presumed to suggest that the latter would desire to be connected with any enterprise which would not bear the closest investigation and afford the soundest basis for the investment of money. Mr. Garland's intimation, therefore, in that respect is entirely uncalled for and unjustified.

It is true that the public has often bought securities of new enterprises which turned out unprofitably, but the public also has often bought other banking-house securities of enterprises of long standing, and highly endorsed by bankers, to their own great loss.

Prior to the World War the great banking houses of Germany employed the ablest experts in many lines to investigate thoroughly new enterprises brought to their attention, and, if reports of the experts were satisfactory, the money would be found for the development of these interests. In this way the big German banking houses took an active part in creating new enterprises, which added enormously to the wealth of that country. If Germany had been content to conquer the business of the world by peaceful methods and by the power of its financial organizations which were concentrated upon industrial developments, it would have won far more for itself than it could have won even if it had been victor in the war.

Formerly great banking houses thoroughly investigated projected railroad enterprises and industrial opportunities, and through that work materially helped to develop this country. They are now to a large extent concentrating their efforts not upon new enterprises but upon refinancing established enterprises, and to some extent, we fear, because of the large profit they make under the present methods of reorganization.

Whenever the spirit of daring constructive upbuilding work ceases to exist among the great banking interests of America, we will as a country have ceased to advance except in the line of industries dominated by the financial powers of the financial centers of the country.

THE SOUTH THE GREATEST LABOR MARKET IN THE UNITED STATES.

IN a recent address to Eastern bankers George Gordon Crawford, president of the Tennessee Coal, Iron and Railroad Company, one of the ablest and most thoughtful business men of the country, said, as quoted in the MANUFACTURERS RECORD:

"The population of the Southern states is approximately 75 per cent white and 25 per cent negroes, both easily trained and efficient in manufacturing when trained. It is found that this population turns eagerly to manufacturing when afforded the opportunity in order to procure a higher standard of living than has heretofore been possible in agricultural pursuits. If manufacturing became proportionately balanced with agriculture, the profits of agriculture would increase, due to the operation of the law of supply and demand. The South is today the greatest, best and cheapest labor market in the United States."

Mr. Crawford's statement is entirely correct. The South has a great supply of labor. Its country region is overpopulated. The percentage of people living in the country is too great compared to the percentage living in cities. City population, through increased industrial employment, must furnish an increased market for farm products, and until this comes about it is impossible to find a ready market for all the diversified farm crops of the South or to find work for the educated boys and girls of the South who are so often forced to go to other sections in order to secure employment.

PROHIBITION A FAILURE? NONSENSE!

COINCIDENTLY, there come to the MANUFACTURERS RECORD a book, "Prohibition at Its Worst," and a pamphlet, "Why Prohibition Is Succeeding," the former by Prof. Irving Fisher of Yale University, published by the Macmillan Company, and the latter issued by the Christian Science Publishing Society, Boston. Yet, despite this contrast in titles, both publications assert that national Prohibition is gaining ground daily.

For instance, Professor Fisher says—the capital letters are ours:

"If Prohibition at its worst, during these first trying years when New York, for instance, was far from ready for it, and when, consequently, it has proved so bewildering and offensive to many good people, IS NEVERTHELESS ACTUALLY ACCOMPLISHING ITS MAIN PURPOSE OF SUPPRESSING THE SALOON AND LESSENING THE USE OF ALCOHOL, we may well think twice before giving it up until it is tried out further."

And the Christian Science publication, after interviewing "heads of organizations representing fully 14,000,000 Americans, compassing all sections of the United States," declares:

"The replies convincingly refute the propaganda of the liquor interests that the dry sentiment is waning or is about to collapse, and show that in reality Prohibition and the growing popular appreciation of its benefits were never closer to the people than right now."

Prohibition a failure? Nonsense!

Especially interesting is Professor Fisher's book from several angles, the first being that he originally was "far from thinking that Prohibition was the best solution" for the national liquor evil. Indeed, he was "reluctantly" compelled, he tells us, "to conclude that Prohibition is the ultimate solution when public sentiment is adequate to enforce it." And that public sentiment is adequate for this enforcement is indicated by the Christian Science pamphlet in assertion that "the interviews (above cited) also show that the influential voting citizen, who represents the best element in the American public, believes that Prohibition is an important step in the right direction, and is determined not to risk losing its benefits by allowing adulterated or modified Prohibition to be put over by any subterfuge of the organized wets."

Professor Fisher's book is eminently practical and concretely convincing. He presents actual facts in the form of figures and tables of apparently indisputable authority. He shows that the number of drunkenness arrests per 1000 persons, based on returns from 349 cities, has shrunk from 18.9 in 1914 and 19.5 in 1916 to 14.1 in 1924, and that "the probable total cases of intoxication" per 1000 of population has dwindled from 36 in 1914 to 15 in 1924. These cities, it is explained, were selected by the Moderation League, described as being composed of such eminent citizens as Bishop Charles Fiske of central New York; Haley Fiske, president of the Metropolitan Life Insurance Company; William C. Redfield, former Secretary of Commerce; Elihu Root, former Secretary of State and former United States Senator; James Speyer, banker, and men of that type, "and not made up of brewers and distillers." The per capita consumption of absolute alcohol is shown to have fallen from 4.74 gallons in 1910 to .099 in 1925.

"The startling fact stands out, of primary importance, that even in New York city Prohibition has succeeded in weakening, if not breaking, the chain of tradition by which the alcohol habit has for ages been handed down from each generation to the next," says Professor Fisher.

In regard to the influence of Prohibition on young people, Professor Fisher shows that the number of cases of juvenile delinquency has been cut in half in New York city alone, and

besides showing the Prohibition sentiment in colleges and universities he brings out the most interesting and important fact that "new recruits in the army of alcoholics are rapidly decreasing." In short, not only is the number of present-day drinkers shrinking, but also not nearly enough recruits are being added to make up for these defections, far less to increase the number of alcohol consumers.

Only one or two other points among the many made by Professor Fisher: The number of arrests for crimes against chastity shrank from 1060 per 1,000,000 population in New York city in 1916 to 700 per 1,000,000 in 1924; arrests in New York for assault shrank from 538 per 1,000,000 in 1910 to 197 per 1,000,000 in 1924; deaths due to alcoholism in New York dwindled from 130 per 1,000,000 in 1910 to 103 per 1,000,000 in 1925, "and not only the death rates but also the amount of sickness reflect the benefits of Prohibition," he adds.

As to enforcement of the Constitutional and the national Prohibition laws, Professor Fisher asks, "What, then, is the situation?" and answers:

"(1) Present conditions are intolerable and must be corrected.

"(2) Even so, they are not as dark as they have been painted; moreover, if we do ultimately correct them, they are now in the nature of temporary evils, destined to fade away in a few years, while the good from Prohibition will go on indefinitely.

"(3) A great net good is already being realized, including over \$6,000,000,000 a year in cold cash values.

"(4) Real personal liberty, the liberty to live and enjoy the full use of our faculties, is increased by Prohibition.

"(5) Light wines and beer cannot be legalized without another Constitutional amendment.

"(6) No such amendment can be passed.

"(7) All that the wets can possibly accomplish is laxity of enforcement, or nullification; in other words, enormously to increase the very disrespect for law which they profess to deplore.

"(8) Therefore, the only satisfactory solution lies in fuller enforcement.

"(9) This can be accomplished—especially with the aid of education—when we 'face the facts.'

"Prohibition is here to stay. If not enforced, its blessings will speedily turn into a curse. There is no time to lose. Although things are much better than before Prohibition, with the possible exception of disrespect for law, they may not stay so. Enforcement will cure disrespect for law and other evils complained of, as well as greatly augment the good. American Prohibition will then go down in history as ushering in a new era in the world in which accomplishment this nation will take pride forever."

With much of this conclusion we are in accord. At the same time we are convinced from observation and other evidence that the American people are voluntarily turning to Prohibition without thought of law compulsion; that the first wild and mischievous defiance is transforming into law observance; that the first reaction of "personal liberty" and "individual independence" has completed its effervescence, and these arguments are losing weight. In short, we feel that the devil has danced his jazz and the piper has been paid.

At the same time the Constitution and the laws must be enforced as necessary, and any official—national, state or local—who does not live up to his oath of office on the line of law enforcement should be branded as a common perjurer and, mayhap, be punished as such.

PREMIER MUSSOLINI, said Tom Skegill, Australian soldier-poet, to a convention of New York school teachers, "is the sworn enemy of democracy and calls it an illusion of which people tire." This will tend to strengthen belief in Mussolini's wisdom, and will disclose in some measure the reason for his national political success.

ALABAMA WISELY CONSIDERING \$25,000,000 BOND ISSUE FOR GOOD ROADS.

A SPECIAL session of the Alabama Legislature has been called for December 28 for the express purpose of discussing the proposition of Governor-Elect Graves for a bond issue of \$25,000,000 and a two-cent gasoline tax with which to finance it. This is a wise move, but the amount of the bond issue might be a good deal larger and the amount of the gasoline tax be much heavier with still better results than proposed in this measure.

It has been proven beyond the possibility of question that a gasoline tax of three or four cents a gallon can take care of an immense road-building campaign, one which will bring prosperity to every state where this is put into effect. Moreover, that gasoline tax does not cost the automobile users a single cent in reality. They pay the gasoline tax, but having good roads the saving on the wear and tear of their cars is far greater than the amount they pay in taxation on gasoline. That tax also takes care of the interest and the amortization of the bonds. More wealth can be created in this way without cost to the people than in any other way that man has ever devised. North Carolina is a shining example of success in this respect, for North Carolina's magnificent growth in educational activities, in town and city building, in industrial progress is largely the outcome during the last few years of its remarkable work in road building through a bond issue which is being taken care of by a gasoline tax.

If Alabama will promptly adopt the suggestion of the Governor-elect and place a bond issue for road building and begin immediate construction as soon as the engineering work can be done, it will create employment for many thousands of hands, it will stimulate the diversification of farming, it will lift farm life out of the ruts, it will increase the educational activities of the whole state—and in this respect Montgomery county, Alabama, is a shining example of what can be accomplished by good roads and educational work combined.

It behooves every man in Alabama interested in the welfare of that state to heartily join in the campaign for this bond issue and for road building. It may possibly be well to start with a bond issue of only \$25,000,000, but a still larger amount will be necessary later on, and all of this can easily be carried by a larger tax on gasoline to the endless profit of the state in all the activities of its business, educational and religious life.

THE FLORIDA EAST COAST RAILROAD'S BIG CONSTRUCTION WORK.

H. N. RODENBAUGH, vice-president of the Florida East Coast Railway Company, in a letter to the MANUFACTURERS RECORD, giving a few particulars in regard to the work that has been done in double-tracking the line and in adding many other important improvements, says:

"Our double-tracking between Jacksonville and Miami is finished and is in operation. Our automatic block signal system between these same two points is also finished and in operation. Our great freight terminals at Bowden, New Smyrna, Fort Pierce and Hialeah, all of which have been built within the last 20 months, are functioning admirably. We have ample motive power, of a most modern design and of very high capacity materially in excess of our immediate requirements and now waiting at our several terminals for the expected demand at the height of our winter tourist season.

"Finally, our construction program has not been an unbalanced one. The whole complex machine has been so carefully proportioned and so well constructed that today our railway system is a medium of transportation that any city, any state or any section of our country can well be proud of."

WEATHER CONDITIONS IN THE NORTH AND WEST IN CONTRAST WITH THE SOUTH.

THROUGHOUT the North and Northwest great snow-storms and bitter weather are blocking the railroads, blocking automobile travel, shutting up Lake travel and causing enormous loss. Necessarily such storms result in much sickness and many deaths. It is announced from New York that on Sunday night the Street Cleaning Department had to call into service 10,000 extra men and to put over six hundred snow plows to work to clear the streets of that city and make them available for traffic.

Against such a condition as this contrast the superb weather of practically the entire South. Long familiar as the writer has been with the winter climate of Florida, he has never experienced three weeks of more unbroken superbly good weather than during the last three weeks in Florida. Day after day has brought the most brilliant sunshine in a cloudless sky, and only one day in all that time has even been partially cloudy.

If it were possible to make the people of the North and West fully understand this climatic difference, the railroads would be unable to handle the traffic that would be crowding to the South. The difference means increased health for young and old. It means lessened cost of operation of business affairs, lessened cost for the individual and the family, because the heavy burden of expense of fuel, of maintaining livestock and all other expenses connected with intensely bitter weather are not necessary in the South except to a very limited extent.

In this climatic difference the South has an asset, the value of which cannot be stated in statistical terms. Its value is almost beyond comprehension. It was well expressed two years ago by Darwin P. Kingsley, president of the New York Life Insurance Company, who, while in Florida, wrote the MANUFACTURERS RECORD that "Climate is the key that unlocks the gates of Paradise." Much more of the same kind Mr. Kingsley added in his discussion of the tremendous value to the South of its climate in contrast with the bitter cold of the North and West. It is quite certain that the aggregate loss in the suspension of business, in the blocking of transportation on the Lakes and on the railroads, will far exceed the total loss in the Florida storm, and it is also quite certain the number of deaths produced by sickness which follows such bitter weather will many times exceed the deaths in Florida from the storm.

A REMINISCENCE ABOUT HENRY WATTERSON.

THE Centennial edition of the Courier-Journal mentioned in the MANUFACTURERS RECORD last week, with emphasis laid on the pre-eminent position which that paper attained under Col. Henry Watterson, or "Marse Henry" as he was almost universally known, reminds us of a little incident of years ago.

Colonel Watterson was in Baltimore for the purpose of delivering a lecture. He was given a dinner by General Agnus, then publisher of the Baltimore American; to this dinner quite a number of leading railroad officials and other men of the city were invited. When the after-dinner speaking began, Colonel Watterson, in a very jocular way, commenced to berate the editor of the MANUFACTURERS RECORD, though they were devoted friends. His criticism was based on the fact that the MANUFACTURERS RECORD was a believer in a protective tariff, and Colonel Watterson, in substance, said:

"My friend Edmonds claims to be a Democrat, but he is a protectionist, and a Democrat cannot be a genuine, all-round protectionist."

And so with considerable raillery, good humoredly, "Marse

Henry" held up the editor of this paper as one whose teachings on protection were not to be followed. The writer knew he would be called upon for a reply, and for a moment he was nonplussed as to how to meet Colonel Watterson's remarks. But suddenly there flashed into his mind an editorial Colonel Watterson had written for the Courier-Journal some years before. In that editorial the Colonel was replying vigorously to one of the readers of the Courier-Journal because of the criticism he had made against his own party. Colonel Watterson believed in a tariff for revenue, but not for protection, and some of his statements on this point had brought forth the criticism of that reader. In a lengthy editorial, full of sound sense, he replied that there were times when an honest newspaper must express its opinion even if in doing so it had to criticize its own party; and then, ending with some raillery, he closed his editorial with the statement which we were able to throw back to Colonel Watterson as a reason why we had sometimes followed his example and criticized the Democratic party on its tariff views. His closing words were:

"Things have come to a hell of a pass
When a man can't wallop his own jackass."

It was gratifying to note that Colonel Watterson did not attempt to deny the correctness of that editorial position which he had expressed, and had nothing more to say against the one who writes this.

ATLANTA APPRECIATES THE COMPLIMENT.

IVAN ALLEN, chairman of the Industrial Bureau of the Chamber of Commerce of Atlanta, referring to the cover-page editorial in this paper last week calling attention to the proposed raising of \$1,000,000 by Atlanta for advertising, wires:

"Have just read your inspiring editorial in this week's issue of the MANUFACTURERS RECORD. Words cannot express my appreciation for this great public service you have done Atlanta as well as the whole South. We are truly grateful and thank you."

Not only will the readers of the MANUFACTURERS RECORD see that cover-page editorial, but we think it altogether possible that a very large proportion of the leading newspapers of America will republish it by reason of the definite demonstration it gives of the power of publicity, showing what Atlanta has already accomplished by its advertising campaign. Other cities throughout the land and other business interests generally will use the facts given in that editorial to emphasize the importance of publicity of the right kind and on a broad scale.

DON'T WRITE IT "XMAS."

THE Charlotte Observer very wisely, under the above heading, protests against the use of the term "Xmas" for Christmas. We are glad that some daily paper has taken up the matter, for just how people can be so thoughtless as to use simply the letter "X" to indicate Christ's name is rather amazing to anyone who stops to think.

"Xmas," intended to represent the birth of the world's Redeemer, is a sad reflection upon our thoughtfulness. More power to the Charlotte Observer in undertaking to change the use of this term. The Observer says: "Is the 'X,' when used in 'Xmas,' intended to be used algebraically as a symbol for an unknown quantity?" It would certainly seem that thinking was not a part of the policy of people who use the term "Xmas" instead of "Christmas," but most people have done so thoughtlessly and without any reflection upon the divine origin or meaning of the term.

PLAN OF BUSINESS MEN TO INVESTIGATE FARM CONDITIONS SHOULD MEET COMMENDATION OF FARMERS.

BECAUSE some of the leading business men of the country, under the auspices of the National Industrial Conference Board and the United States Chamber of Commerce, have proposed a joint commission to make a careful study of the industrial conditions of the country, Congressman Dickinson of Iowa unwisely takes the ground that he believes this commission was formed "not to get more information, but to filibuster against passage of a genuine farm-relief bill at the approaching session of Congress," and he added that "the farmers know their own conditions and what they need better than the National Industrial Conference Board and the National Chamber of Commerce can possibly know them."

In this Mr. Dickinson is taking a view which is without justification. If there is one thing the farmers ought to desire, it is the fullest possible investigation of agricultural conditions by the foremost business men of the nation. For many years the business leaders of the country did not understand the farm situation and left entirely to the farmers and to the politicians a study of farm conditions. Recently there has been a great awakening on the part of bankers and manufacturers, who now realize that if viewed only from a selfish standpoint it is incumbent upon them to know the farm conditions and how they can be bettered.

Many of these men have more than a selfish view in studying the matter, for some are still largely moved by a desire to benefit others, and low down in the scale of humanity, indeed, must be a manufacturer or a banker who does not desire to do whatever may be in his power for the prosperity of the farmers and for every other class of Americans.

For years we tried to arouse the manufacturers and bankers of the country to the necessity of studying the agricultural situation. They are beginning to do it. Many bankers, throughout the South pre-eminently, are leaders in this investigation. They are doing all in their power to get at the root of the trouble and to co-operate with the farmers by advice and by financial help in the diversification of their crops and in putting their business on a sounder basis.

As a class farmers do not conduct their operations with the same regard to business methods as do business men. Most of them do not know the exact cost of operating their farms or the gross or net results which come from their labors. They keep no set of books which could enable them or anyone else to know what every crop produced and whether it yielded a profit or a loss. It is difficult, of course, for them to do so. Farming is somewhat unlike any other business in this respect. But if business men can be induced to study the whole farming situation, they can from their experience in handling business matters render an important service to farmers by suggesting improved methods of accounting and possibly improved methods of producing and marketing their crops.

Farm prosperity is essential to industry and to general business prosperity. The business men of the country realize that. They are, therefore, eager to see a revival of farm prosperity and to understand all of the conditions which have brought about the present lamentable condition of agriculture. Congressman Dickinson should, therefore, have hailed with great pleasure the proposed investigation by a committee appointed by the United States Chamber of Commerce and the National Industrial Conference Board.

It will be easy enough, when the report has been made, to find out whether it is sound or not. If it does not express the exact condition of farming operations and suggest remedies

for the benefit of agriculture, it will then be time enough for Congressman Dickinson, or any other critics, to point out wherein the report has failed.

The prosperity of the farmer is reflected in prosperity in every other line of life in the land. Hard times for the farmer are conducive to straitened times in all other industries. Everything material in this world comes from the earth, and even the roots of financial prosperity are embedded in the soil.

For this very reason, that everything comes from the earth, it may be that the industry of agriculture never has been adequately remunerated. Subconsciously, the generations of the world have felt that farm products simply spring out of the soil and that the farmer's activity is confined to dropping seeds into the ground, while Nature does the rest, virtually unaided. Further, throughout history, agriculture has largely been conducted by actual serfs or by free labor of such manual and unintellectual type that it always was content with low wages and was not regarded as worth much reward. Thus, a low standard—possibly, a most unfairly low standard—of wages and living for farm workers was established almost at the outset of civilization, and its rise has been almost negligible when compared with improvements in all other industrial lines.

In these days the difference between the standards of earning and of living conditions between farm owners and workers, on the one hand, and other employers and workers, on the other, has attained such proportions that the farmer rightly feels that substantial improvement in agricultural remuneration is his due. And the fact that the farmer and the farm worker are entitled to better pay and to better living conditions must be acknowledged by every fair-minded person.

As in every other problem, Education is the first answer. The "city man" and the city woman must be taught that agriculture is one of the most exacting, most laborious and most hazardous industries in the entire category of enterprise. First and foremost, there is the cash investment, on which the farmer is entitled to fair return. Next is his time—and agriculture seems to be the only line of business or professional work in which a man's time is not figured in terms of real money. The hardships of an agricultural life also must be considered as worthy of some financial return—long hours in the heat of a summer sun, the back-breaking activities of grubbing weeds or tossing hay; the thousand and one items involving severe physical labor. Also, there are the hazards of weather—possibilities of drouth which may wipe out a promising crop, or wind or unseasonal frost. Truly, the farmer does not simply drop seed into the ground and sit in ease while Nature brings it to fruition.

All these facts, and others, the farmer knows full well, and now he has awakened to realization that the laborer in the field is worthy of his hire fully as much as the toiler in a factory or a bank. It has taken him a long time to learn this lesson; one hardly can expect that people in other walks of life will learn it more rapidly.

FLORIDA FIGHTS FOR ALL THE STATES.

FOLLOWING recent argument by Thomas B. Adams as *amicus curiae* at the request of Florida, the Supreme Court of the United States now has before it that state's contention that the Supreme Court has jurisdiction to consider the question of the unconstitutionality of the Federal state tax and the right of the state to complain thereof by original bill in that court. And on the decision of this question as raised by Florida hang results of great moment to all the states in the Union.

As Mr. Adams sees it, the case is of national importance from two aspects:

"First, the fight which Florida is making is the 'last stand,'

so to speak, of states' rights. If Florida is not entitled to be heard in this case, the dual system of government which the framers of the Constitution thought they were setting up no longer exists in this country, and we will have, instead, the plan which Alexander Hamilton proposed in the Constitutional Convention: That the states be abolished and the Governors be appointed by the Washington Government.

"Second, if Florida succeeds in invalidating the tax within the territorial boundaries of Florida, then the tax is invalid everywhere, including all levies made under the Act of 1926, and possibly the levies made under the Act of 1924. If the 80 per cent credit provision of the Federal estate tax is void, then all the provisions of the Act relative to the estate tax are void in their entirety."

Whether Federal power in the states has reached the extreme indicated by Mr. Adams may be open to argument; but, at all events, there is no question that it has encroached in tremendous measure, and further encroachments may bring the situation to the danger point which Mr. Adams believes has already been reached.

The state of Florida has taken a fine step for clarification of the situation and, regardless of the decision in time to be rendered, is deserving of the appreciation of all the states.

GAS TO HEAT HOMES OF NATION.

THE same demand for the comforts and conveniences of life that brought about the abolition of the kerosene lamp will bring about the abolition of the coal stove and furnace," said Harry C. Abell, president of the American Gas Association, at the recent annual convention at Atlantic City. "The homes of the nation will in future be automatically heated and thermostatically controlled so that the householder need only light the gas for the pilot light in the fall and turn it off in the spring. There will be no ashes, no smoke, no soot, no cellar space for coal and ashes."

Commenting on the huge strides made by the gas industry in taking on large amounts of industrial heating business, Robert M. Searle, president of the Rochester Gas and Electric Company, Rochester, N. Y., said his company would spend \$42,000,000 in the next seven years to take on the heating business.

Alexander Forward of New York, secretary-manager of the association, said that the gas industry was already getting away from the use of oil in its manufacturing processes, statistics for 1925 showing that the industry used 35,000,000 gallons less than in 1924. He said that uncertainty as to the future supply and price of gas oil should tend to accelerate the reduction in its use. He reported that new customers at the rate of more than 400,000 a year are being connected to gas mains, and predicted that 1926 would be a banner year in increased gas output.

NEARLY \$150,000,000 INCREASE IN TEXAS PRODUCTS THIS YEAR.

IN spite of the decreased cotton prices, it is reported that the value of the agricultural output of Texas this year will be \$1,120,000,000, or \$122,000,000 more than the production of 1925. Including crops, livestock and farm products generally, oil, forestry and manufactured products, the total output of Texas farms and factories amounted to \$1,775,000,000, or an increase of \$149,000,000 over 1925, as per the following comparative tabulation:

	1926	1925
Farm products (crops).....	\$910,000,000	\$799,000,000
Livestock.....	210,000,000	199,000,000
Minerals (including oil).....	275,000,000	270,000,000
Forest products (lumber, rosin and turpentine)	60,000,000	51,000,000
Manufacturing	300,000,000	287,000,000
Total	\$1,755,000,000	\$1,606,000,000

IS THE FEDERAL GOVERNMENT MORALLY LIABLE FOR BONDS ISSUED BY CERTAIN STATES WHEN UNDER ITS CONTROL?

WHEN most of the Southern states were absolutely under the dominion of the Federal Government, in reconstruction days from 1867 to 1876, the legislative members were practically put into office by the Federal Government, with its soldiers stationed at the polls to see that the negroes voted and the white people did not. These legislatures, corrupt and incompetent to the extreme, issued and sold many millions of bonds, the proceeds in nearly all cases being wasted or stolen.

It is a serious question whether or not the Federal Government was not recreant to its responsibilities in failing to warn the investment world against the bonds or in not assuming liability for them. The Southern states were not independent. They were under the direct control of the Federal Government. Many of these bonds were repudiated after the people of the states regained the management of state affairs. Few thoughtful people who understood the situation have ever questioned the legality and morality of this repudiation, under the circumstances. We do not, of course, include in this statement bonds issued by two Southern states long prior to the Civil War. For their repudiation we think there is no justification, and the Federal Government is in no way concerned about them. But it might be an interesting question, if it were possible to bring before the Supreme Court a suit to test the responsibility of the Federal Government for the bonds issued by its agents—mainly illiterate negroes under the control of unscrupulous scoundrels who flocked to the South after the war in order to loot what was left—in the control of Southern legislatures, and thus remove from the Southern states the stigma of those who are trying to prove that the states themselves are liable and were guilty of unjustified repudiation in refusing to pay these bonds. No such suit can be brought, because the United States Government cannot be sued in this way, but it would be an interesting matter if Congress would pass a bill authorizing the United States Supreme Court to make a study of the whole problem.

"THE LURE OF THE SOUTH."

NOT to be outdone by the Illinois Manufacturers' Association, which is arranging for a "Good-Will Tour" of members of that organization through the whole central South, starting early in January, St. Louis people are also proposing a "Good-Will Tour" through the South, and doubtless they will have as many strong, representative business men of St. Louis as there will be on the Illinois tour.

There has been some discussion of a similar tour on the part of Cincinnati business men, and it is altogether probable that the action of Chicago and St. Louis will stimulate the Cincinnati people to follow their example.

Just why Baltimore and other Eastern cities having a large trade with the South do not carry out similar tours we cannot say, but we think it is altogether probable that they cannot much longer stand back, for "the lure of the South" is upon the whole country and business men everywhere are beginning to realize that the tremendous buying power of the South demands that all the business interests of America interested in that situation should utilize the opportunity of studying the South in person.

The Antioch Baptist Church, the oldest negro church in Houston, Texas, is preparing to erect a \$250,000 church building.

Eastern Bankers See Great Industrial Opportunity in the South.

LIKE ALL OTHER INVESTIGATORS OF THIS SECTION, THEY RETURN ENTHUSIASTIC ABOUT ITS NATURAL ADVANTAGES AND ITS PROGRESS.

Forty Eastern bankers recently made a tour of the Southeastern states at the request of the officials of the Southeastern Power and Light Company in order to study the hydro-electric developments of that organization.

In reply to inquiries by the MANUFACTURERS RECORD as to the impressions made on them by their study of the South, we have a number of interesting letters voicing the views of some of the strongest bankers of the East as to the outlook in the South.

Rollin P. Grant, vice-president of the Irving Bank and Trust Company, New York, writes:

"Our trip extended over a period of 10 days, and it was intensely interesting from start to finish. The conclusions, which seem to be unanimous with the party at the end of the trip, were most favorable to the sections visited." And to this he added: "The natural resources of this section are very great."

It is probably natural that the bankers visiting hydro-electric plants and possible power sites with specific relation to a study of the wisdom of handling the securities of such plants should emphasize the power resources of the section, but the vast mineral wealth would seem to have deserved more attention than it receives in the letters as a whole.

C. W. Hunter, vice-president of the U. G. I. Contracting Company of Philadelphia, speaks strongly of Alabama's coal, iron and limestone as in close proximity.

H. H. Bemis of Curtis & Sanger, bankers, of Boston and New York, speaking of the great progress made in Southern development says:

"Although this is attributed to the availability of hydro-electric power, that is only one of the factors." And in this statement Mr. Bemis is entirely correct, as there are many other factors which caused a rapid development of Southern industries even before the great hydro-electric developments of the present.

Harrison & Co., bankers, of Philadelphia, think the natural resources of the South are almost unlimited and that they have not yet been fully realized even by the people of the South themselves. He adds:

"With the proper utilization of these natural advantages we believe the South is destined to become one of the richest and most productive sections of the country."

W. H. Putnam of Putnam & Co., bankers, of Hartford, Conn., saw two essential things in the South vital to the prosperity of a section, "and that is men and women of energy with a determination to succeed and improve themselves, and an adequate supply of power."

The South is, indeed, full of men and women of energy who are determined to succeed and who could build an Empire of Prosperity with far fewer advantages than the South possesses, but when these men and women are backed by an abundant supply of power and other resources, it is difficult to set a limit to what the future progress will show.

The whole spirit of these letters is one of enthusiasm for the South and the readiness of these banking interests to handle the securities of Southern hydro-electric operations.

President Martin and other officials of the Southeastern Power and Light Company have rendered a distinct service to the South and to the country itself in giving these Eastern

bankers the opportunity to see this section for themselves and to study its resources. Every time men of affairs can be induced to make a trip like this to the South they return with greater enthusiasm for this section and the larger opportunities for investment in the great productive enterprises in the South.

The letters follow:

Has All Natural Values, Excellent Soil, Mineral Wealth, Fine Type of Labor, Good Climatic Conditions—These Combine to Insure Continued Rapid Development.

Irving Bank and Trust Company.

New York, November 23.

Editor Manufacturers Record:

Our trip extended over a period of ten days and was intensely interesting from start to finish. The conclusions, which seemed to be unanimous with the party at the end of the trip, were most favorable to the possibilities of the sections visited. The visitors not only enjoyed an excellent opportunity to see the properties of the Southeastern Power and Light and of its subsidiaries, but also were able to get a very clear picture of the extent to which that company has made scientific application of water-power to the various uses of the Southeast.

The natural resources of this section are very great, and the intelligent utilization of this power cannot fail to lend tremendous force to the logical development of the area.

A most active spirit of co-operation was evident everywhere throughout the trip. It was not only friendly, but friendly in an extremely practical business way. The evidences of co-operation came from private individuals and business concerns and organizations, and was well marked also in Government circles.

The public officials of the states of Georgia, Alabama and Mississippi were most definite to the effect that not only would outside capital be welcomed in the development of Southeastern resources but would be carefully safeguarded as well. These assurances of co-operation from official sources spoke well for the manner in which the Southeastern Power and Light has conducted its operations and spoke well also for the possibilities on ahead.

It is not often that we find such an excellent basis of understanding between public utilities, communities they serve and those in positions of official responsibility. The power company seems to realize that their interests and the interests of the various communities are one, and that only as the communities grow and develop and prosper can the company's fortunes advance.

One of the interesting and important elements in this entire development situation is the excellent organization of the Southeastern Power and Light and its subsidiaries. Not only have they conserved and co-ordinated material resources, but they also have welded human resources into a powerful constructive force with the definite object of contributing to the welfare of all the communities served by them.

The members of the visiting party, having in mind the fact that commercial banks and investing houses of the North and East for a long time have shown their confidence in the

securities of the Southeastern Power and Light, were gratified to note the active interest of investors of the Southeast in these securities. The development of an intersectional investment spirit like this cannot fail to result in benefit all round.

Clearly, the Southeastern part of the United States is coming and will continue to come fast. The natural values are there, soil is excellent, a fine type of labor available, climatic conditions good, altogether forming an excellent basis for the operations of such a company as that under whose auspices the trip of the bankers from the North and East was taken.

ROLLIN P. GRANT, Vice-President.

More Convinced Than Ever of the Great Possibilities in the Southeast.

Bonbright & Co.

New York, November 23.

Editor Manufacturers Record:

The impression of the South that we received on our recent trip was an extremely favorable one, and I feel that as a result we are more convinced than ever of the great possibilities in the Southeastern region. It is largely because of our appreciation of the present and future development of the Southeastern states that we have undertaken the financing of the principal power and light companies of that section.

S. A. MITCHELL.

Possibilities for Growth Are Great, But People of the South Not Yet Fully Alive to Them.

Harrison & Co.

Philadelphia, November 23.

Editor Manufacturers Record:

Throughout the whole section of the South, which we recently visited, we believe the possibilities for future growth and expansion are great. We believe, however, that the people of the South are not yet fully alive to their opportunities. The natural resources are almost unlimited, especially the wealth of water-power. With the proper utilization of these natural advantages we believe the South is destined to become one of the richest and most productive sections of the country.

HARRISON & CO.

Two Great Resources, Energetic Men and Women and Cheap Power, Abundant in the South.

Putnam & Co.

Hartford, Conn., November 22.

Editor Manufacturers Record:

We had a most enjoyable trip through Georgia, Alabama and southern Mississippi with Thomas W. Martin of the Southeastern Power system. This territory seems to have two things which are absolutely vital to the prosperity of the people, and that is men and women of energy, with a determination to succeed and improve themselves, and an adequate supply of power.

It has the first in great abundance, which is evidenced on all sides by the growing cities, the fine homes and the general development in manufacturing and agricultural efforts, and it has the power in the hydro-electric and steam stations which we saw. This power, unsurpassed for economy in any other section of the country, and with these men and women, is bound to produce a situation so desirable and so prosperous that it will be the envy of all. This territory is a good place in which to live.

W. H. PUTNAM.

Impressed by Developments Under Way and Pleased With the Spirit and Enthusiasm of the People.

Guaranty Trust Company of New York.

New York, November 19.

Editor Manufacturers Record:

In reference to the Southern trip made by a group of investment and commercial bankers as guests of the Southeastern Power and Light Company. I will state that the trip was a complete success.

There were about 40 guests and 10 or 15 officials of the various subsidiaries of the Southeastern Power and Light Company who accompanied President Martin, and I think I can voice the sentiment of all the bankers who made this trip by saying that their impressions were most favorable.

They were not only quite pleased at the present hydro-electric developments in the mountainous sections of Georgia and Alabama, but were much interested also in the potential possibilities of the proposed developments.

We were informed that the customers of this great company in the states of Georgia, Alabama, eastern Mississippi and western Florida were also happy in the fact that their industries would receive continuous service by reason of the tying in of the great high-powered lines of the various units with each other.

All along we found that people were enthusiastic about the progress of their section and were co-operating in every way with officials of the various subsidiaries. We found there was a large customer ownership which had a tendency to create a splendid good will.

We found that the high officials of the states as well as those of the municipalities were in sympathy with the constructive movements of the officers of the Southeastern Power and Light Company.

We found efficient operation and enthusiasm among the administrative officers and employees of each of the subsidiaries.

A large number of railway trunk lines which traverse that particular section seem to be operating most efficiently.

We found that Atlanta as the center of Southeastern commercial and financial development was quite prosperous, and we were delighted to see some of the industries of that magnificent industrial city of Birmingham, which justly boasts of its cheap coal iron and steel products.

In the agricultural sections visited we found the psychological sentiment was to some extent unsatisfactory because of the decline in the price of cotton, but various authorities consulted on this subject gave us the impression they had seen much worse days in the cotton industry, and that proper diversification for next year, together with the formation of financing companies to lend money on distressed cotton, would tend to correct that situation.

E. W. STETSON, Vice-President.

Plentiful and Cheap Power Available.

The U. G. I. Contracting Company.

Philadelphia, Pa., November 23.

Editor Manufacturers Record:

The industrial development of Alabama and Georgia is expanding at a very rapid rate. Alabama particularly is favored with coal, iron and limestone in close proximity, and these natural assets should continue its progress. It would seem to me that a deep-water outlet to the sea in this district would be a considerable advantage in helping foreign shipments.

Being particularly interested in the engineering phase of the Southern developments, I paid especial attention to the

hydro developments of the Southern Power and Light Company in Georgia and Alabama. The construction seems to be of a very permanent nature, and after completion of the new developments proposed by the Southeastern Company, a plentiful and cheap supply of power should be assured to help Southern progress.

C. W. HUNTER, Vice-President.

**One Man Who Is Favorably Impressed With
South As It Is, Yet Fails to Realize That
Its Greatest Resource, Its People, Is
Increasing All the Time.**

Curtis & Sanger.

Boston, Mass., November 26.

Editor Manufacturers Record:

Before I went South recently I already had favorable impressions of the Southeastern states and of the properties which are included in the Southeastern Power and Light Company. The result of the trip was a confirmation of these impressions.

The properties themselves are in excellent shape and well run, and the personnel of all the properties is notably loyal and efficient.

Figures show that industrially these Southeastern states have gone ahead fast in the past few years. The value of agricultural products, instead of being more than that of industry, is now considerably less. Although this is attributed to the availability of hydro-electric power, that is probably only one of the factors. It is permitted in the Southern states to operate mills on a 24-hour schedule. This method adds to the productive capacity of the mills, thereby lowering the cost of production. In Massachusetts and perhaps in other Northern states this is not allowed. Whether or not this industrial expansion will continue at the present rate is doubtful. Labor conditions in the South are likely to approach those in the North, to the disadvantage of the former in its cost of production of manufactures. The South discovered a natural resource in its labor, but the availability and quantity of this resource is undoubtedly limited.*

[*According to figures taken from United States Census Reports and presented by Richard Woods Edmonds in the fourth article of his series, "Why Cotton Mills Have Been Moving South," the reserve of labor on Southern farms has been rapidly increasing in spite of the simultaneous increase in industrial development, with the result that today there is actually a larger reserve of white labor in the South on which industry can draw than there was 10, 20 or 30 years ago.—Editor MANUFACTURERS RECORD.]

We were much impressed by the words of local business men, as well as those of the Governor of Georgia and the Governor and Governor-Elect of Alabama, as to their fair attitude toward capital. They professed to recognize that outside capital invested in these Southeastern states will insist on being treated as a partner in the development of the natural resources of the South. As a matter of fact, the Southeastern Power and Light Company has a large number of local stockholders, which is an element of strength.

Some of us visited Muscle Shoals and brought away the conviction that it should be controlled, through lease or otherwise, by the Alabama Power Company in order that its potentialities may be of maximum service to the territory. The possibilities of the nitrate plant furnishing cheap fertilizer to the farmer would seem to have been much exaggerated. If members of Congress appreciated what seemed to us the true situation, they would clear up the Muscle Shoals question promptly and in a businesslike manner.

H. H. BEMIS.

\$4,700,000 West Virginia Coal Merger—Companies in Consolidation Operate 13,362 Acres.

A statement from the office of John Nickerson & Co., New York, announces the consolidation in the non-union fields of West Virginia of nine coal mining and selling properties, valued at \$4,700,000. The new organization will be known as the West Virginia Southern Coal Company, of which Everett Drennen of New York will become president and Walter H. Cunningham of Huntington, W. Va., vice-president.

Companies entering into the consolidation operate 13,362 acres in the Kanawha and Logan fields, with a present annual production of approximately 1,000,000 tons, it is stated, while coal reserves are estimated at 72,000,000 tons. The major part of the production is from the Dorothy seam, a high-grade bituminous coal, largely used for domestic purposes throughout the West. Properties embraced in the merger include the Marsh Fork Coal Company, Birch Fork Coal Company, Seng Creek Coal Company, Leevale Coal Company, Silush Coal Company, Vanball Coal Company, Basic Coal Company, Burgess Branch Coal Company and Siler & Siler. It is understood that an offering of bonds of the new company will soon be made by a group of bankers headed by John Nickerson & Co.

**\$3,000,000 Municipal Improvement Program
Under Way at Fort Lauderdale.**

Fort Lauderdale, Fla.—This city now has under construction about 50 miles of water-distribution mains, a new filter and water-softening plant and pumping station, eight sewage-pumping stations and force mains, and a sewage-disposal plant of the activated sludge type. These improvements, together with a garbage incinerator plant, will cost \$3,000,000. In addition plans and specifications have been prepared for the construction of a complete sanitary and storm sewer system, together with a drainage canal about four miles long, which will extend across the northern section of the city. It is expected that work will begin soon on this canal, which is to cost about \$500,000. The cost of the proposed sewer system and drainage canal will be around \$4,000,000.

The work on the filter plant has been started and foundations for the sewage-disposal plant are under way. About three miles of distribution mains have been laid, together with a mile of sewage force mains and the foundation for one of the pumping stations.

The contractor for the filter and water-softening plant and pumping station is the Andrews-Fay Construction Company of Miami; on the water-distribution system, the Federal Construction Company of Birmingham, Ala.; on the sewage-disposal plant, Charles C. Case of Atlanta, Ga.; on the sewage-pumping stations and force mains, the Meador Construction Company of Atlanta.

The cast-iron pipe is being furnished by the American Cast Iron Pipe Company, Birmingham, Ala., and the United States Cast Iron Pipe and Foundry Company, Burlington, N. J.; the filter equipment by the American Water Softener Company, Philadelphia, Pa.; valves by the Kennedy Valve Manufacturing Company, Elmira, N. Y., and the Michigan Valve Company, Detroit, Mich.; water-works pumps and motors, by the De Laval Steam Turbine Company, Trenton, N. J.; sewage pumps and motors, by Fairbanks, Morse & Co., Chicago, and the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa.; miscellaneous equipment, by the Builders Iron Foundry, Providence, R. I.; Simple Valve and Meter Company, Philadelphia, Pa.; Wallace & Tiernan Company, Inc., Newark, N. J., and Burford, Hall & Smith, Atlanta, Ga.

Solomon, Norcross & Keis, Inc., of Fort Lauderdale and Atlanta, Ga., are the consulting engineers.

Martin Lake, Alabama, the Greatest Artificial Lake in America—A \$17,000,000 Enterprise.

By RICHARD WOODS EDMONDS.

One fine day in the fall of 1912 my level party and I left our level, level-rod, axes and bundles of stakes at the edge of the forest, through which we had been slowly and laboriously chopping out and marking off the shore line of what would one day be a great lake, and walked down a sloping cornfield to the shanty of a negro farmer for a drink from his well.

As we hauled up the bucket the aged darky, who had come out to greet us in hospitable rural fashion, said:

"Boss, dey tells me you all's gwinter build a big dam down de river a piece to back de water away up."

"That's right," I said.

"When dat dam's built, boss, kin we see the water from up hyar?"

"Old man," I said, "you see those little white flags along the hill up there, just at the edge of the woods?"

"Yas, sir; boss."

"Well, the water will come to those little flags," I said.

"It will stand just about 10 feet deep over the ridge-pole of your house."

The old man gazed out and down into that broad valley, falling away and widening out immensely, yet as far as he could see still the valley of the Kowaliga—still only one of the bays of the beautifully indented lake that was to be—then he looked back at me, and with earnest, grave conviction, said:

"Boss, dey cain't do it!"

"Oh, yes they can," I replied.

"Skusin' me, boss, but dey cain't do it," the old man insisted, with unshakable conviction.

"Why can't they?"

"'Cause, boss, de Good Book says de worl' shall not be destroyed again by water, but by fire," he replied, with an air of absolute finality.

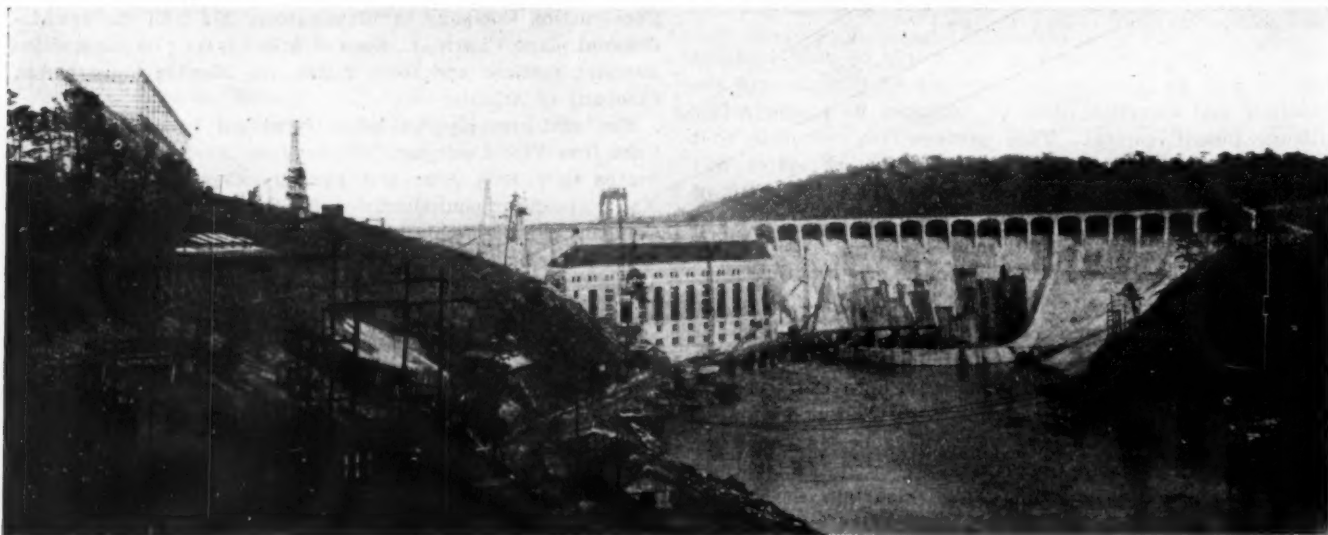
Today if that shanty had been left when the 40,000 acres of the basin were cleared, the water, rising behind its 150-foot concrete barrier, would have crept into the old man's doorway and extinguished the fire on his hearth. Then an inch a day and even more slowly as the spread of the sur-

face became wider, it would have started up the walls, and at this writing would be two or three feet deep on his floor, with 20 feet or more to rise before the lake filled. For the dam has been completed, the power plant nearly completed, and two of the four 35,000-horsepower water-wheels of its ultimate equipment are sending their power out over taut copper wires to a world of industry of which the old darky never dreamed.

As my guides and I drove down one of the old, familiar roads the past summer—now abandoned in favor of a new road above the shore line—it was not so difficult to understand the feeling of an old man, who probably had never been 15 miles from his home and had no conception of the relative insignificance of hills and valleys so broad and deep.

We had started from Alexander City, and for miles before we saw even a trickle of water the hillsides and the lowlands were bare of trees and brush, with here and there blazing heaps of brush and small timber, and more often ash-heaps left by piles already burned. Once we passed the camp of a gang of workmen. Further along we came to a section in which large timber had stood. It has been sawed to boards and timbers in the company's temporary mills and had served its purpose in construction. In order to make the reservoir safe for navigation, healthful and beautiful, as well as to protect the water-wheels from floating debris, the company appropriated \$1,500,000 for the work. All through 1924, 1925 and part of 1926 gangs of men were at work clearing the land, burning all brush and small trees and moving large timber to the company's temporary sawmills. Over 1000 men, housed in camps throughout the basin, were employed on the job.

Arrived at last at the damsite, I found the dam, nearly completed, standing like a massive wall across the deep, narrow gorge of the Tallapoosa River. At its foot on the upstream side a little pond of water was backed up the river three or four miles. Eventually, I knew, that little pond would extend 26 miles up the Tallapoosa and for miles up half a dozen large tributary creeks, making the largest artificial lake in the world. Its deeply indented shore line, over 700 miles long, will be largely wooded, partly bordered by farms;



LOOKING UPSTREAM AT MARTIN DAM OF THE ALABAMA POWER COMPANY.



OPERATING THE FLOATING FILLING STATION WHICH SUPPLIES THE MOSQUITO FLEET WITH OIL AND COMPRESSED AIR.

in some places rocky, precipitous and wild; in others, low-lying and cultivated.

To say that Lake Martin will impound 530,000,000,000 gallons of water conveys little idea of its size. The much-talked-of Muscle Shoals dam will impound only 170,000,000,000 gallons, while the Roosevelt Lake, for a while conceded to be one of the world's largest artificial lakes, originally impounded 420,000,000,000 gallons, 110,000,000,000 less than Lake Martin.

This immense capacity qualifies Lake Martin for a great storage project, as distinguished from a "run of river" plant like that at Muscle Shoals. The surface area of the lake,



THE MARTIN DAM HOSPITAL.

40,000 acres, provides a storage capacity in the uppermost one foot of depth of 1,742,400,000 cubic feet, or 12,893,760,000 gallons. In other words, at seasons of low water the water-wheels can receive a flow of 12,893,760,000 gallons of water in excess of the daily flow of the river without drawing down the level of the lake more than one foot.

Power that is available only at flood stages—secondary power, in other words—is worth very little. Owing to the storage capacity of Lake Martin the full 180,000 horsepower of Martin Dam will be primary power, available 12 months of the year, while farther down the river the two smaller dams of the Alabama Power Company will increase their effectiveness by putting to work again the same steady, willing flow that has turned the giant wheels of Martin Dam.

Another beneficial result of the large storage of flood waters will be assurance of year-round 4½-foot navigation in the Alabama River from the Tallapoosa River to the Gulf of Mexico, while the lake sections of three counties hitherto unproductive, because inaccessible, will be easily reached by the lake boats. The thorough clearing of the basin in advance of filling will leave it clear of floating debris and therefore safe for navigation.

One of the most unusual results to flow from a work of

man is a change of climate predicted by the Alabama agricultural experts, who believe that the large body of water will render frostproof the points of land between the bays, together with an extensive area to the south of the lake. Should this prove to be the case, a large part of the land so affected will probably become valuable for early and late trucking and fruit growing.

Since the clearing of the land began in 1924, one of the most interesting and most exacting phases of the work has been health control. The work of clearing the basin and keeping down mosquitoes employed from 1000 to 1600 men. To safeguard their health in their temporary camps, elaborate precautions were taken, including typhoid vaccinations for all who would take them. Every care has been used to prevent fly and mosquito breeding in and around the camps.

From the time the dam was closed and water began to creep up the slopes, active measures were begun to prevent the development of the anopheline wiggler, or mosquito larva. Minnow ponds were established for breeding top minnows, or gambusia affinis, and as the water rose hundreds of thousands of minnows were released to feed upon any mosquito wigglers they could find.

To keep the surface of the water properly oiled it has been necessary to build and constantly add to a fleet of boats designed for shore line oiling. The boats are equipped with oil tanks and air-pressure cylinders for spraying. Since the water began backing up the river the boats have used an average of 500 gallons per day.

In order to keep down the expense of spraying completely every 10 days a shore line that has been rapidly approaching



THE FLOATING FILLING STATION.

a length of 700 miles, a complete system has been carefully devised in which 1000-gallon storage tanks and oil barges to take oil to the spraying boats have played their part. The spraying continues from early spring until the first heavy frost of autumn.

The clearing, the inundation, the health control over 40,000 acres of land are only a part of the elaborate preparations

necessary to harness one of the untamed forces of nature, the construction of the dam and power house cost more money and employed more men than the clearing of the basin. The dam is 1970 feet long, 160 feet high to bridge over spillway (the highest in the South). The spillway section is constructed on the arc of a circle, with a radius of 530 feet. The spillway is provided with 20 steel gates, each 16 feet high by 30 feet long. These gates when raised will permit over 200,000 cubic feet of water per second to flow over the dam. A gantry crane for raising and lowering the gates is mounted on the bridge over the spillway. In the headworks section of the dam are three penstock gates to each eurbine unit, each gate being 9 feet 9 inches by 29 feet 3 inches and weighing 41,000 pounds. Another large gantry crane, located on the headworks deck, is required to operate these gates.

The power house, planned for an ultimate installation of four water-wheels of 45,000 horsepower capacity each, is built for a present installation of three, with provision for enlarging when the fourth is desired. It is now 56 feet wide by 224 feet long, built of steel, brick and concrete, with an ell at one end to house the switchboard.

The total excavations in earth and rock were 315,000 cubic yards and the concrete poured was 431,500 cubic yards. The total cost of the development was about \$17,000,000.

This is a very brief summary of the preparations necessary before one of the four 37,500-K. V. A. generators can be set to spinning out the electrical energy that industry, agriculture and thousands of homes will use. It takes no account of the transformer station or of the miles of high-tension transmission line required to deliver the current to customers.

If in closing I may be pardoned a digression from the straight and narrow path laid down by custom for the guidance of the fancy in writing such an article as this, all of these alterations of the face of the earth are a fair sample of the lengths to which human ingenuity and energy will go in order to supply human wants. I wonder if the Jewish prophets who wrote into the ancient books that later became the Christian Bible their observations on man's dominion over the earth could have had the faintest prevision of the lengths to which in our day that dominion would reach.

Man tames the impetuous, destructive energy of floods, compels it quietly to await his pleasure, and then, as it lies sleeping in the cool, placid waters of a lake in which children frolic at his will, he releases it and sets it to work with giant ease to haul heavy trains over far-away hills, drive ponderous machines in forges, foundries, shops and factories where the innumerable wants of man, from brick and structural steel for housing, through the books and papers for his edification, misinformation and entertainment, to the flimsiest of fabrics for his lady's vanity are fulfilled; or, with unequalled versatility, to chill domestic refrigerators, spin fans to cool homes and offices, wash and iron the clothes; or, with controlled heat, to melt tons of metal in incandescent furnaces or curl millady's hair; to make breakfast toast, coffee and waffles under the housewife's hand as she sits at breakfast with her family; or, again, with willing strength, to haul the well-fed workers by thousands to their tasks and in the evening back to their homes again, light them through the evening and to bed; and finally, with sleepless patience, await their pleasure through the night.

What a world! And all created by man's dominion over the simple old world of the ancient prophet and the scarcely more modern darcy.

\$500,000 of Mobile Bonds Bring Premium.

Mobile, Ala.—On November 16 \$500,000 4½ per cent bonds were sold by the city to I. B. Tigrett & Co. of Jackson, Tenn., at par, accrued interest and a premium of \$19,700.

Diatomaceous Earth Discovered in Quantity Near Augusta, Ga.

By N. L. WILLET, Augusta.

Your recent informative article on diatoms and diatomaceous earth by L. M. Drake, chemist, of Daytona Beach, Fla., has led up to the discovery by myself of large deposits of this very pure diatomaceous earth some 15 miles from Augusta and directly on the Charleston and Western Carolina Railway of South Carolina, of which railway I am agricultural and industrial agent. I should say that it is as fine as or finer than that found at Eustis, Fla., which is the standard in this country. These beds are found at the stations Cathwood, Jackson and Cowden. They are 8 to 10 feet deep and cover quite large areas, one of them 1000 acres. This soil burns like tinder. Dried, it is as light in weight as feathers. It grows vegetation rankly, but to mules and humans in cultivating the soil there entails an intolerable itch. I knew years ago of these strange beds, called peat beds.

Following this up several years ago, I discovered these areas were the beds of old-time cypress ponds which contained fresh-water sponges. I found that the soil was wholly the remains of old sponges and contained no extraneous matter. In the soil was an infinite number of glass, or quartz, spicules which formed the firm structure of the sponge and whose sharp points made the prickling.

Mr. Drake's article in the MANUFACTURERS RECORD caused me to give the soil to experts in order, perchance, to find in it the diatom. The test showed the earth was full of spicules and diatom broken bodies and diatoms. The soil was burnt in a burner and the remains were pure spicules and the diatom. Under the microscope the spicules show up in marvelously different shapes, some like the old-time scimitar swords, some like dumbbells, some like an Irishman's blackthorn shillalah with its prongs. From end to end of the spicule runs a canal in its center, and with a diameter of one-fifth of the total diameter of the spicule. This is full of air and is thus heat-resisting and absorbent. The natural soil makes a fine compost component and is splendid for potting work as used by florists and nurserymen. As Mr. Drake said, diatomaceous soil is the best of all of our non-conductors of heat, the best of our absorbents and abrasives.

The soil, incinerated or otherwise, makes excellent microscopic slides, and they are surprisingly beautiful. At 80 diameters we see a field looking like a forest torn to pieces by a cyclone. The spicules are piled on top of each other and point in every direction. At 240 diameters we can study half a dozen individuals, and at 800 diameters the one individual. So strong is the spicule that most of these—and they are glittering white—have their original forms, while the softer diatoms appear mostly in broken parts and look spongy and porous.

Nashville Church Plans \$450,000 Building Program.

Nashville, Tenn.—A \$450,000 building program will be started soon by the First Evangelical Lutheran Church here. A site has been purchased and an architect will shortly be selected.

New Canning Plant Operating at Avon, Fla.

Avon Park, Fla.—The Hills Brothers canning plant has begun operations here, with 75 persons employed; this number will gradually be increased to 125. The plant was built by local capital, which organized the Avon Canning Company, who now lease the plant to the Hills Brothers Company.

Tacna Arica—Secretary Kellogg's Happy Proposals.

By COURTENAY DE KALB.

"We are obviously dealing with a question which turns upon a point of national honor," says Secretary of State Kellogg in his note on the Tacna Arica controversy made public on December 2. This observation marks a long step in advance since our Government began to act as arbitrator between Peru and Chile. That point of national honor prevented two sister republics in America from settling the question of the unfulfilled Treaty of Ancón for nearly forty years. Had this question, now fully understood by Secretary Kellogg, been comprehended in Washington at the time when the representatives of Peru and Chile reached agreement on a protocol for submitting the matter to the arbitration of the President of the United States in 1922, it is certain that President Harding would have declined to arbitrate.

It was plain to all men who know the Latin temperament that the arbitral protocol was merely a left-handed way of seeking good offices in the diplomatic sense. Neither country could have asked for the good offices of the United States in trying to solve the riddle, for that would have been the same thing as admitting that this question of national honor did not exist. There had been a diplomatic impasse for decades, and they could agree on that. So they asked the United States to decide whether the Treaty of Ancón should be applied at this late date, disregarding the fact that all the conditions had been changed in the interim. However, neither Peru nor Chile ignored that fact, and they did not expect the President of the United States to ignore it. They agreed to submit an impossible question to our President, which he should have known was impossible, and therefore he should have surprised both parties by doing what both expected he would do, which was to declare that he could not decide such a question as they had propounded, since it merely represented an impasse, and then should have offered his kind offices to try to find an escape from the dilemma.

Secretary Kellogg has learned that a long step toward a basis of agreement on anything has been taken when two Latin-Americans agree to talk about a question, or to allow another to talk with them about it. Indeed, we may venture the suggestion that Secretary Kellogg has learned more about Latin-American character than he ever knew before, since he has struggled over the Tacna Arica problem. This is not to imply that there is anything wrong with Latin-American character, but it is different from the character of the people of the United States. The Secretary says, "I have * * * I think, been able to arrive at a sympathetic appreciation of the different points of view which have been presented." He also says, concerning the point of honor, that it "is a very real thing, and in this particular case it is perfectly clear that national susceptibilities in this regard are peculiarly sensitive in both countries and must be fully protected." It is refreshing, after the foolish comments in the American press, to read Secretary Kellogg's conclusions from his enlightening experience in dealing with "sensitive" Latin-Americans: "Delivery of the disputed territory in its entirety to one or the other of the parties has virtually ceased to be regarded as a practical solution by anybody who really hopes for a permanent settlement." It has cost a good deal of money, and caused risks of war to be taken, to bring our Government at Washington to a realization of this fact, which was clear to all who knew the Spanish-American character before the sad error was committed, of deciding that a plebiscite could still be resorted to in accordance with the Treaty of Ancón, and that this "point of

national honor" could be settled by an attempted legal interpretation of the status of the dispute.

"We may as well face the issue squarely and recognize that division of this territory between Chile and Peru on any basis of agreement presents almost insuperable differences so long as each applies to every arrangement suggested the test of whether it may conceivably enable the other to claim a moral victory." It is amusing to reflect that this identical spirit dictated the protocol which submitted an unarbitrable question to the decision of our President. Nevertheless, we have made progress, for we have learned how, at Washington, to interpret our neighbors. If the lessons so well learned in the controversy between Chile and Peru shall be reduced to fundamental principles of Latin psychology for application in our dealings with Mexico and with Nicaragua, we shall benefit largely in future, and Latin-American affairs will absorb less space in the columns of sensational newspapers, and consume less time and clerical labor in the Department of State. We have just witnessed the utter failure to drive the Mexicans to accord the protection guaranteed by their Constitution to American interests acquired prior to the Constitution, ending in voluntary recognition of those rights over which we have expended so much heat and incurred so much bad temper.

There is a note of weariness in this State paper of Secretary Kellogg, for it has been a long lesson, but he has learned it now so well that he can repeat it in his sleep. Even when he reduces the question by the application of logic, and finds the only possible things to do are either to give the territory to one of the disputants, or to divide it between them, or to give it to neither of them, he still recognizes that the Latin psychology revolts spontaneously against allowing him to do any of those things, but requires to be led, to be persuaded, to be complimented into acquiescence with the cold findings of logic. The discovery of these things has added greatly to the value of Mr. Kellogg as Secretary of State.

If it seems that undue stress has been laid on these almost intangible aspects of the case, it must be observed that they are, as Secretary Kellogg has found out, more essential than the practical importance of the thing that finally may be done through accepting the good offices of this Government. In his understanding they now loom far higher than the value of all the arrangements for the august commission that was sent out so hopefully by the President to effect the plebiscite that proved impossible.

Since the cession of the disputed territory to Bolivia, corresponding to the third of the logical possibilities, according to Secretary Kellogg's analysis, yields a moral victory to neither party, it has likelihood of being accepted. Already it is announced that Chile is disposed to accept the proposal in principle. Peru will require but little persuading to adhere to the plan. In a sense it enables both republics to perform an act of simple justice with little cost to either of them. Compared with the territory which Chile does not and would never be expected to surrender, lying to the south of Tacna and Arica, covering the rich nitrate fields, the disputed provinces possess relatively small actual value. They are not known to possess any remarkable resources. On the other hand, Bolivia could use them as her connection with the sea, which is greatly needed to develop her national life. Once she did possess such an outlet to the Pacific. It was not precisely Tacna and Arica, but a strip that included the important port of Antofagasta, now serving the great Chuquicamata copper mines (Chile Copper) and a great

part of the rich nitrate fields. Therefore, Bolivia has a moral claim to restitution of her territorial access to the great ocean highway that no one would dispute. In ceding Tacna and Arica to Bolivia tardy justice would be accomplished, and in the rounding out of the national existence of Bolivia both Peru and Chile get rid of a dangerous quarrel over land that could actually benefit neither in great degree.

It may be worth while to recall that the war of 1879 between Chile, Bolivia and Peru arose over a question of taxes demanded from a Chilean nitrate company within what then was a sort of corridor connecting Bolivia with the sea. Peru championed the cause of Bolivia, to which Chile replied with a declaration of war, based on the existence of a "secret" offensive and defensive alliance between Peru and Bolivia. It is useless at this late day to investigate the merits of that dispute. The thing that all true friends of Latin America would deplore would be the renewal of hostilities over the remnant of an issue now useless in the practical development either of Peru or Chile. The suggestion made by Secretary Kellogg has high merit and is likely to be accepted. It avoids the pitfall of conceding a moral victory to either of the contesting parties. It removes the cause of dispute by granting what may be considered a natural right of access to the sea to a sovereign nation. The territory is not notable in any respect for its natural resources. Acceptance of the proposal seems probable, and in settling this dispute, with its restoration of a condition that will make for growing friendship between neighboring republics, not only will a deplorable war be averted, but our own country will have added a tradition of sweet reasonableness in its dealing with the Spanish-Americans that may help us to perform a better duty as big brother in the future.

The conclusion of this case by performance of the high office of peacemaker may establish a precedent that might become the greatest legacy of the Kellogg incumbency of the office of Secretary of State, in showing how to be diplomatic in dealing with the republics of the Western Hemisphere just the same as when we deal with the great nations of Europe. We have long needed a lesson in true diplomacy in our Latin-American relations. In handling a case where either a rational solution or a war must follow, we hope that Secretary Kellogg has established a precedent that will tend toward a rapprochement between the United States and all our sister nations of the South.

Norfolk Bank Merger—Resources \$40,000,000.

Norfolk, Va.—The merger of three Norfolk banks into a single institution with resources of \$40,000,000 has been announced, following the approval by the Comptroller of the Currency of a plan to effect the consolidation. Banks involved in the transaction include the National Bank of Commerce, Norfolk National Bank and the Trust Company of Norfolk. It is understood that the name for the new institution will be significant of the designations of the merged banks.

The consolidation plan provides for an institution with a combined capital, surplus and undivided profits of \$5,000,000, half of which will be represented by paid-in capital, \$2,250,000 of surplus and \$250,000 in undivided profits. It is expected that R. S. Cohoon, president of the National Bank of Commerce, will be president of the new bank.

\$350,000 for New Houses in St. Louis.

St. Louis, Mo.—The Traymore Home Syndicate plans the erection of 19 houses at a cost of \$18,000 to \$20,000 each. According to Manske & Bartling, Inc., architects, of St. Louis, the project is a co-operative homes proposition, with janitor service, central heating plant, central garage, etc.

\$500,000,000 IN MOTOR-VEHICLE REVENUES FOR 1926.

Facts and Figures Presented at Highway Research Meeting.

Motor-vehicle revenues for 1926 will approximate \$500,000,000, according to a report presented at the sixth annual meeting of the Highway Research Boards, division of engineering and industrial research of the National Research Council, held December 2 and 3 in Washington, and attended by highway officials and road builders, machinery, equipment and material manufacturers and others interested in obtaining the latest information concerning development in highway research. The license fees and gasoline taxes for 1925 amounted to \$407,000,000, or about 32 per cent of the total disbursements of \$1,288,000,000 for rural highway purposes in 1925 by both state and local authorities. It was pointed out that in 1921 when highway expenditures were approximately \$1,000,000,000 the motor-vehicle revenues amounted to but \$128,000,000, and since then the motor-vehicle revenues have increased 220 per cent, contrasted with a 28 per cent increase in expenditures for highway work. During the period motor-vehicle registration increased 99 per cent. These figures were given in a paper by H. R. Trumbower of the University of Wisconsin, chairman of the committee on highway finance.

Mr. Trumbower's paper pointed to the extremely low cost of collecting the gasoline tax. Whereas it costs the Federal Government \$22.50 per thousand to collect custom duties and \$12.10 per thousand to collect internal revenues, the gas-tax collection costs amount to only \$2.64 per thousand dollars collected. Of the net collections 66 per cent was devoted to the construction and maintenance of state highway systems, 22 per cent was diverted to local highway use and 4 per cent to meet highway bond requirements. About 89 per cent of the gasoline-tax money and 90 per cent of the license fee was used for the construction and maintenance of highways, state and local.

A paper prepared by T. R. Agg of the Iowa State College, chairman of the committee on economic theory of highway improvement, showed that the annual tire cost per car for 6000 miles a year over the average concrete pavement was \$31.65, compared with \$316 over a loose macadam road.

Other reports and papers submitted included the following: Structural Design of Roads, by A. T. Goldbeck; Character and Use of Road Materials, by H. S. Mattimore of the Pennsylvania State Highway Department; Highway Traffic Analysis, by G. E. Hamlin of the Connecticut State Highway Commission; report of the Committee of Maintenance, by W. H. Root of the Iowa State Highway Commission; Culvert Investigation, by R. W. Crum of the Iowa State Highway Commission; Low Cost Improved Road Investigation, by C. N. Conner of the Highway Research Board; the Methods and Possibilities of Road Soil Investigations, by Charles Terzaghi of the Massachusetts Institute of Technology.

The Highway Research Board is composed of representatives of those national organizations interested in the development of the highways of the country, and its membership includes representatives of technical organizations, of Federal and state departments and of higher educational institutions. It is not of itself a research agency, but serves as a national clearing house for all matters pertaining to highway research, and in making this information available credit is always given to those agencies or individuals responsible for the particular research.

Farmers of Madison county, North Carolina, sold 2400 pounds of turkeys to help supply the Thanksgiving trade.

Power and Mechanical Show Typifies American Ingenuity and Industry.

[Special Correspondence Manufacturers Record.]

New York, December 6.

Probably no more interesting and illuminating illustration of American progress toward highest possible efficiency could be found than is provided in the Fifth National Exposition of Power and Mechanical Engineering, which opened in the Grand Central Palace here today. Mechanical and industrial ingenuity and production find their fruit in machinery, parts and accessories of almost cunning contrivance and of the highest grade of manufacture possible in a land of industrial fastidiousness. Four floors are filled by the exhibits, and official report has it that nearly 500 manufacturers have their wares on display.

While power-generating apparatus and accessories had been expected by many persons to prove the foremost attraction, there also are equally interesting exhibits on different lines, such as displays of refrigerating apparatus, of heating and ventilating equipment, of devices for the handling of materials, of mechanical power-transmission machinery, of machine tools and other varieties of products. Many exhibits showing advances in the development of methods for transforming coal and oil into heat and power attract interested attention likewise.

In mention in this article of exhibits by individual concerns it must be understood that these have been picked at random by the writer in a stroll through the Exposition; to tell of the wonderful machines and apparatus of all kinds presented to view by all the exhibitors would fill a tremendous volume.

For instance, the Allis-Chalmers Manufacturing Company shows the new Allis-Chalmers Reyrolle armorclad switch-gear in operation, combining in one factory-built unit the busbar structure, circuit-breaker, outgoing-feeder connections and instrument transformers. A new enclosed, self-ventilating motor is shown in operation, said to be a dirtproof, dust-proof, dripproof and splashproof motor. An interesting exhibit of hydraulic turbine runners of various types shows models of some of the larger wheels, such as the unit at Niagara Falls, developing 83,000 horsepower under 213-foot head, impulse wheels for units up to 30,000 horsepower, and heads up to 2300 feet, and also high-speed low-head runners. The exhibit is under the direction of A. F. Rolf, manager of the Allis-Chalmers New York office.

Among the features of the Worthington Pump and Machinery Corporation exhibit is a Worthington type L centrifugal pump, representative of two new lines of centrifugal pumps for general service recently developed by the company. The pumps are designed for operation on 60-cycle motor speeds, with sub-bases, designed to take standard induction motors. The pump casing is split on the horizontal center line, with the suction and discharge nozzles cast integral with the lower half. Access to the interior of the pump is obtained by removing the upper half of the casing without disturbing the pipe connection or pump alignment.

Another new product is the Worthington Axiflo sump pump, designed for the intermittent draining of pits, basins and tanks in power plants and industrial plants and for the drainage of sumps in basements located beneath the sewer

level. The pump is driven by a direct-connected vertical motor with float-switch control.

One unusual feature displayed by the Walworth Company of Boston is its method of testing Kewanee unions with air under water. A testing machine has been set up and the union is immersed in water and compressed air turned through it, making it possible to detect the slightest leak. Also, space is given to Walworth Sigma steel valves and fittings for high pressures and temperatures. Walworth Sigma steel is the product of a foundry technique resulting from X-ray studies of the interior of steel castings and foundry research, by which sound homogeneous steel, free from interior defects and internal strains, can be produced.

Besides, a full line of Timken bearings, suitable for use in power-plant equipment, machine tools, electric motors, gear-reduction units and other industrial machinery, the Timken Roller Bearing Company also displays a mechanical device which operates seemingly in defiance of all mechanical laws. The demonstration is intended to show how the rollers in a Timken bearing are positively aligned at all times without guidance by the cage. The only part of the machine visible is a Timken cone, on whose raceway a number of rollers constantly travel, apparently without any visible means of driving power. Concealed beneath the table are four electromagnets, connected to a gear-reduction unit and a small motor. The magnets revolve in a plane parallel to the plane of the table top and in a path parallel to the periphery of the cone raceway. As the magnets revolve the magnetic force attracts the rollers so that they travel about the cone. Since there are always two widely separated areas of the large end of the roller in contact with the rib or shoulder of the cone, the rollers are always positively aligned. The demonstration is designed to emphasize the point that the cage of the Timken bearing merely serves to space, not align, the rollers.

An attractive backdrop, the center of which displays a bearing within a bubble, attracts thoughtful attention at the Hyatt Roller Bearing Company booth. A new type B. & S. adapter pillow block, presenting unusual features, leads the mechanical exhibit. This type of block provides a heavy-duty, solid-race, anti-friction bearing for service on ordinary commercial cold-rolled shafting, without heat treating or turning down the shaft. The usual exhibit of new line-shaft bearings, said to save 15 per cent of total power bills, fit all hangers and split for easy installation; live pulley-conveyor idlers, with Hyatt boxes, electric-motor housings, truck wheels and a full line of Hyatt roller bearings complete the display.

The A. P. Green Fire Brick Company of Mexico, Mo., exhibits its regular line of fire-clay products and, in addition, has a special exhibit of high-alumina refractories; that is, refractories manufactured from Missouri diaspore, with fusion temperatures ranging from 3400 to 3578 degrees Fahrenheit. These brick are especially designed for oil-fired furnaces, where unusually high temperatures are encountered; also for use in various other types of industrial furnaces where unusual conditions are encountered. These brick are known as "Kruzite" and "Mizzou." The company also exhibits Sairset high-temperature cement, an air-setting product, with a diaspore base; and Diamond Jo high-temperature cement, which is a heat-setting cement.

Shown by the R. H. Beaumont Company, Philadelphia, is a complete working model of centralized coal and ash handling systems, including the skip hoist, tramcar, suspension

bunker, coal-weigh larry, cable-drag scraper system, ash hoppers and gates, ash larry discharging to the skip hoist, which will be used for handling both coal and ashes. Coal is received at the plant in railroad cars, discharged into a hopper beneath the tracks, elevated and discharged from the bucket to the tramcar, which carries it over the bunker, discharging it at whatever point necessary. The tramcar is unique in its operation and is entirely automatic, working in conjunction with the skip hoist. It is discharged by means of a tripper, which is placed over the bunker in any position desired where the coal is to be dropped. The weigh larry not only conveys the coal, but also records the weight discharged to each boiler, keeping an accurate record of each boiler's consumption.

The Lunkenheimer Company, engineering specialties, exhibits this year, for the first time, a 10-inch 400-pound steel-monel mounted non-return valve. A number of all monel gate globe and check valves are also shown, with a number of steel valves, both sectioned and regular stock articles, and a few representative bronze valves.

The Wheeler Condenser and Engineering Company is exhibiting a model of a condenser with built-in valves in the water boxes for reversing the direction of flow of water through the tubes. It has been found that reversing the water flow through a surface condenser is one of the most efficient means of cleaning, or rather keeping it clean. Another innovation, first placed in successful operation this year, is the Wheeler Floating Tube Sheet condenser, in which the tubes are rolled in the tube sheet at both ends. In order to take care of expansion and contraction due to temperature changes, one of the tube sheets is floated on a rubber expansion joint of a type similar to that frequently used in the exhaust connection between turbine and condenser. In addition to these two new products, the latest development in Wheeler evaporators, feed-water heaters, condensate pumps and steam jet air pumps and cooling towers are exhibited.

The Everlasting Valve Company displays its usual line of Everlasting valves for boiler blow-off, water-column connections, water-column drains, the Everlasting tandem valves, single unit of two valves for each boiler blow-off outlet; the Everlasting valve special, built for pressures up to and including 500 pounds, and added is Everlasting's companion angle valve, shown for the first time in New York.

An interesting feature presented by the Combustion Engineering Corporation is four scene-in-action displays, two pertaining to the Lopulco system and two to the combustion steam generator. These consist of glass plates on which are mounted transparent pictures of the equipments. In each case is shown an elevation of a furnace and boiler. Light is admitted through this plate in such a way as to show the flame action which takes place, and this action reproduces with considerable fidelity that which actually occurs. This year a new scene-in-action display not only indicates the flame action in the furnace, but also shows air in its travel through the air heater up to the furnace, as well as the action of the air and coal in the couch burner.

The Automatic Weighing Machine Company, a division of the American Machine and Foundry Company, exhibits its 883-B apron feed and 515-A automatic sacking scales. This 883-B scale is adapted for weighing non-free-flowing materials, such as coal, cottonseed, meal, beans, limestone, clinkers and shale. To offset the sluggishness of these materials, the scale has been equipped with a power feed which assures an even flow, and when equipped with an automatic bin regulator will operate without attention. The 515-A automatic sacking scale automatically fills, bags or sacks to predetermined weight from bulk material. The scale is accessible from both front and rear and may also be suspended from overhead. It is a standard machine for bagging acid phosphate, ammonium sulphate, bone meal, fertilizer, stucco,

tankage (dry) and other materials presenting similar physical characteristics. The pump department exhibits a fuel oil pump, in which an arrangement of rollers, held loosely in a slotted rotor, eliminates the sliding friction so common to the usual rotary pump and produces a stage effect. The wrapping machine department has its latest development for wrapping bread, cake, cartons and packages, etc. Instead of wrapping each package in a sheet of paper of uniform size, this machine wraps first and cuts the paper afterward—in other words, each package measures its own wrapper; weight and width variations in size of packages are automatically taken care of within wide limits.

In the display of the De Laval Steam Turbine Company is a working exhibit of worm reduction gear drives, consisting of a small motor driving a speed reducer, which, in turn, will drive a speed increaser, the latter hooked up to a small generating set. These speed reducers have only two moving parts, the worm and worm wheel, besides the ball bearings of the worm, and these parts are entirely enclosed in a rigid cast-iron housing, which also serves as the oil well. They are built with the worm either above or below the worm wheel, and for vertical shaft drives with the shaft extending above or below the gear. Single-reduction gears provide for ratios up to 100 to 1, while double-reduction gears are used for ratios up to 8000 to 1. For heavy-duty, continuous service positive pump lubrication is used. In addition to the operating machines, a line of the worm gears is shown.

An interesting display by the Fulton Company, heating specialties, valves, temperature control, of Knoxville, Tenn., includes temperature regulators for liquids and also for air; vent valves for steam heating, radiator-air valves, damper regulators for steam boilers, hot-water boilers and vapor heating; pressure-reducing valves, Ja-Nar radiator covers, Syphon radiator shields, hot and cold water mixer, steam and water mixer, duct control air temperatures, expansion joints for steam risers, interlocking valves for fuel-oil systems, anti-syphoning valve for fuel oil systems, temperature limit regulator and pressure-reducing valve for oil installations.

Among the liquid-level controllers, both direct connected and remote control, shown by the Fisher Governor Company is a remote control proposition actuated by sensitive bellows and liquid transmission, fitted with a unique liquid-transmission device so that the valve may be operated at a considerable distance away from the float cage. This liquid transmission unit consists of the Syphon bellows attached to the float cage, and which, by means of a connecting rod and rod crank, is expanded or contracted as the float rises and lowers. Connected to this bellows is a piece of flexible copper tubing, the other end of which is also connected to a second bellows. This second bellows has its free or moving end connected to the valve stem of the controller valve. The bellows and tubing are all completely filled with a liquid which is hermetically sealed to prevent its escape.

Three articles of interest in the showing of the Coffin Valve Company are a gate valve equipped with a Keltly motor-drive unit, which is its latest type of electric operation; a Dow disc-arm pivot valve, fitted with a hydraulic cylinder equipped with automatic solenoid control valve, which allows this pivot valve to be used as a check valve in pump discharge lines, and a solenoid controlling valve for operating a hydraulic cylinder from a remote point.

The Bethlehem Steel Company exhibit features the new Bethlehem pulverizer and also the Bethlehem Diesel engine. There are also the Bethlehem Dahl burner and several varieties of pumps.

The Niles Gear Company, division of the Niles-Bement-Pond Company, shows two items of special interest, one being Maag gears, which is a system of gearing based on

ideal engineering and production, and the other the hardened and ground gear. This type of gear is used for very heavy load conditions because of its ability to withstand wear, and it is used for very high-speed conditions, because its very high degree of precision permits a drive to be made with straight spur gears with a minimum of vibration and noise.

Yale ball-bearing chain blocks are a feature of the Yale & Towne exhibit. In the Yale spur-gear chain block the introduction of large capacity ball bearings on which the load sheave rotates is the latest important development. Friction is much reduced, enabling the operator to lift the full load with considerably less effort. The massive steel load sheave, the heart of the block, and which must support the load and withstand the shock of surges and overload stresses, rolls on Yale high carbon, chrome alloy steel ball bearings, containing 16 or more steel balls on each side of the load sheave. These bearings are a combination of the radial and thrust type; the inner and outer ball races are chrome alloy steel, hardened and ground to limit gauges, insuring the greatest possible accuracy.

The Flynn and Emrich Company of Baltimore shows a complete Huber mechanical stoker in active operation, in so far as it can be operated without fuel. This stoker is of such size as would apply to a boiler, say, of 400 horsepower, and capable of producing a load of 200 per cent on the boiler with natural draft. At the booth, also, are panels showing illustrations of steam plants where the concern has installed stokers under boilers of various sizes and types.

The entire exhibit of the Otis Elevator Company covers products of its commercial steel castings division, which is located at its Buffalo works, and which steel castings are made entirely by the electric-furnace process. The company exhibits one of the large valves made in that department, and which weighs in the neighborhood of 4000 pounds. This casting has been X-rayed and withstood a 2000-pound hydrostatic test. It was constructed for one of the very large power stations, and is quite typical of a large number of other castings to be used for the same purpose. For high-pressure and super-steam work, for which the large valve will be used, it also exhibits a number of the smaller type, known as "control valves." Another exhibit shows its magnet rings and spiders, the former being of dynamo steel, which permits of a reduction in the cost of machining to a considerable extent. The spider, of a little higher carbon, is a remarkable casting, and in appearance looks much more like a forging than a casting.

The Leeds and Northrup Company shows an electric CO₂ recorder, practical for boiler-room use; a new electric-flow meter, with accuracy unaffected by lead and contact resistances or line-voltage variation; a new generator field temperature recorder, which gives a continuous record of temperature of revolving field and has automatic alarm contact, and a new frequency recorder, which combines the advantages of an open scale and a negligible temperature coefficient. Also there are a new direct recording B. T. U. recorder for measuring and recording automatically the heat of boiler-feed water; remote station-load totalizing recorders, giving continuous records of individual station loads, and in addition the system total.

The American Pulley Company exhibits its line of steel split pulleys. With regular belt pulleys of many types and sizes is seen one designed for the car-lighting system of railway coaches. Another group in this exhibit includes pressed-steel reels, spools and beams. The first two are used in the annealing, winding and transporting of wire and the latter product serves a somewhat similar purpose in the textile field. The company has recently begun to market a two-wheel pressed-steel hand truck, and for the first time is showing the complete line in nine different styles.

In the booth of the American Car and Foundry Company

a Berwick electric rivet heater is prominent; it gives a constant, steady flow of heated rivets as fast as the hammer gangs can drive them, either by hand or machine. Also, there are a forging heater for heating for upsetting or forging work and a bar heater, which is a model in miniature of a 20 to 30 foot bar heater.

The display of the Hardinge Company, Inc., York, Pa., is in charge of W. H. Withington and includes working models of the Hardinge conical mill and the reverse current air classifier, the Ruggles-Coles dryer and the Hardinge super thickener and clarifier.

The Brown Instrument Company feels that the most important feature of its exhibit is a display especially designed to illustrate the operation of the basic operating principle of the new Brown electric flow meter—the inductance bridge principle as applied to its flow meter. Another important feature is the latest models of Brown Electric Company meters, shown in the large boiler-front-type indicator, the small switchboard-type indicator, with double scale to indicate flue-gas temperature, etc., and strip chart recording types in single-record, duplex-record and multiple-record models.

The Power Specialty Company exhibits samples of Foster superheaters, including convection and radiant heat types, samples of Foster economizer construction, sections of Foster water-cooled furnaces and aero pulverizer.

The Aero Pulverizer Company shows complete aero unit coal pulverizer and parts of pulverizer after long service.

The display of the Cutter Electrical and Manufacturing Company consists primarily of 4000-ampere, 3-pole circuit breaker for use on an alternating-current circuit. This breaker is arranged for operation by means of an electric solenoid. It is of the autoite, or non-closeable, overload construction on solenoid operation, as well as on manual operation. It is said to be impossible to close this circuit breaker completely should a short-circuit overload condition exist on the circuit.

The Bartlett Hayward Company of Baltimore in its exhibit specializes on the Fast's flexible coupling, an all-metal, "double-engagement" flexible coupling, deriving its flexibility from a design based on a simple mechanical principle in accord with the best engineering practice. Two spur gears, one on each shaft end, are completely meshed with the internal gears of a floating-sleeve—that is the simple principle in brief. It is designed to meet exacting service conditions from the simple installation of a blower to that of the largest steam turbine or huge steel mill reversing drive. It is able to transmit power at high or low speed with equal effectiveness.

An attractive feature of the Diamond Power Specialty Corporation exhibit is a miniature boiler, by means of which the principles of the correct application of soot blowers to varying boiler conditions are demonstrated. In addition to this working model, motion-picture films showing the use and benefits of soot blowers on oil-fired boilers are shown, these films having been made by the United States Navy as part of its training course in boiler-room practice.

A new machine, known as the Beaver power drive, is a feature of the exhibit of the Borden Company, Warren, Ohio, in which an important point is that it uses any type or kind of die stock or pipe cutter. The machine is portable and is equipped with suitable motors, and the cut gears run in oil. The machine cuts pipe, threads pipe and makes up fittings, using whatever kind of tools the purchaser may have on hand.

The dates of the power show were chosen also by the American Society of Mechanical Engineers for its forty-seventh annual meeting, while the American Society of Refrigerating Engineers and the Taylor Society opened their annual sessions today also. Social activities will provide diversion in the meetings of both organizations.

Ice-Cream Manufacturing Now an Important Southern Industry.

By JOHN M. GIBSON, Associate Editor, Ice Cream Field, Atlanta, Ga.

A successful business man familiar with ice-cream manufacturing problems and possibilities in various parts of the country declared not long ago that if he had sufficient money to invest in an ice-cream business he would invest in the South. He mentioned North Carolina, Arkansas and Florida as the states where he considered such an investment most likely to prove profitable.

The South has many important advantages over the rest of the country as an ice-cream section; and those who have watched the rapid development of other industries during recent years predict that its progress as an ice-cream and dairy section in the past will seem trivial a few years hence.

"For several years the designation 'Nature's ice-cream empire' has been used in connection with the South," wrote Roberts Everett, secretary-manager of the Dairy and Ice Cream Machinery and Supplies Association, five years ago in one of the national ice-cream trade magazines. "Whoever coined the phrase had logic on his side. For in length of season, climate and extent of territory the great South may well appear as if designed to be a stronghold of ice cream."

In the next paragraph, however, Mr. Everett pointed out what was obvious from a study of ice-cream statistics at that time and is still evident, in the light of the most recent production figures, that the South's greatest claim to dis-

a comparison of these figures with those for 1924, when the South produced only 14.46 per cent of the total for the entire country.

In 1925 Alabama, with an estimated population of 2,467,190, reported a total ice-cream production of only 1,636,500 gallons, or about one-half of 1 per cent of the national total. Arkansas produced only four-tenths of 1 per cent of the total. Florida produced 1 per cent, a considerable increase over the two-thirds of 1 per cent for the year before. Georgia, Kentucky, South Carolina, Louisiana, Mississippi and Tennessee showed ice-cream outputs amounting to less than 1 per cent of the total of 322,729,000 gallons for the United States. Six Southern states—Alabama, Arkansas, Georgia, Louisiana, Mississippi and South Carolina—showed an average consumption of less than one gallon per capita, or slightly more than one-third as much as the average consumption for the country and only about one-sixth as great as that for

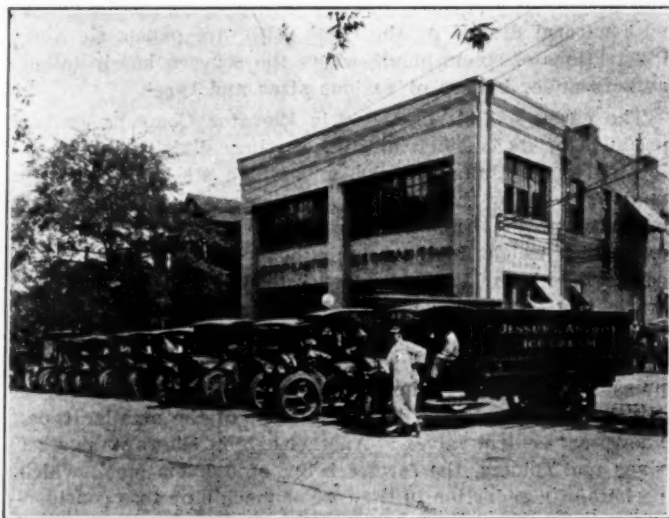


HOME OF POINSETTIA ICE-CREAM COMPANY, ORLANDO, FLA.

inction as an ice-cream section lay in its potentialities rather than its past accomplishments. He qualified his remarks by declaring that the South was unquestionably the "coming" ice-cream section of America.

The South, with approximately 31 per cent of the total population of the United States, produces only about 15 per cent of the country's ice cream. The average per capita consumption for this section as a whole is only 1.4 gallons a year, which is exactly one-half the average for the country, amounting to 2.8 gallons. These figures are based upon reports of the 1925 production by states, prepared by the Bureau of Agricultural Economics of the United States Department of Agriculture.

Signs of progress toward greater consumption are seen in



MODERN PLANT OF THE JESSUP AND ANTRIM ICE-CREAM COMPANY, ATLANTA, GA.

the banner ice-cream state of the Union—Pennsylvania—which last year produced and consumed an average of nearly six gallons per capita. Six states in the South—Kentucky, North Carolina, Oklahoma, Tennessee, Texas and Virginia—showed a consumption between one and two gallons per capita, while only one exceeded the national average of 2.8 gallons. Florida's average for 1925, totaling 3,466,500 gallons, averaged 3.2 gallons for each resident of the state.

Several factors are mentioned as being responsible for the comparatively poor showing made by the Southern states in ice-cream manufacturing. This section, favored in many respects, has had to make progress in the face of many difficulties. The first condition that suggests itself is economic. A district that for many years was constantly faced with the problem of making a living and providing the necessities of life did not provide a particularly good market for a product that in the past has been best known as a delicacy. With increasing prosperity, which is reflected in every phase of Southern activity, from automobiles to public education, this difficulty seems likely to be removed. Another important factor is the competition of soft-drink and candy manufacturers and soda-fountain operators. Nowhere else in the world, perhaps, do competitors make a stronger appeal for the nickels and dimes of potential ice-cream buyers. It is

estimated that 75 per cent of the soft drinks sold in the United States are consumed in the South.

Still another difficulty has been the lack of high-grade milk and cream in large quantities near at hand. In April, 1924, D. W. C. Yarborough, manager of the Chapin-Sacks Corporation of Birmingham, Ala. (subsidiary of Southern Dairies), found local dairy products insufficient to meet the needs of his firm's local factory and contracted to buy 7500 gallons of cream a month from dairy interests of Ripon, Wis. In making this announcement, which received considerable notice in the Alabama press, he estimated that during the six months of the ice-cream season his factory alone would send approximately \$100,000 of good Alabama money to Wisconsin for products that Alabama was in some respects in a better position to furnish than the other state.

Apparently Mr. Yarborough's statement regarding dairying possibilities had an excellent effect and caused greatly increased interest in the production of milk and cream on a commercial scale in Alabama. In July of this year he was quoted by the Birmingham News to the effect that "Alabama dairies are now supplying practically all the needs of Alabamians in that respect," referring to the demands of the ice-cream industry. He pointed out that, thanks to the activity of newspaper writers, "gradually the number of dairy herds increased, until now we get our entire supply of raw milk from Alabama dairies."

Speaking at a convention in Little Rock, Ark., about three years ago, Prof. A. C. Baer, head of the Department of Dairy Husbandry of the Oklahoma Agricultural and Mechanical College, expressed the opinion that while there had been general progress during the past few years for the industry as a whole, both the quantity and quality of ice cream produced in the South had shown a notable increase. He stated that he personally was acquainted with many of the ice-cream manufacturers of several Southern states and knew the conditions under which their plants were operated. "Hundreds of fine modern ice-cream factories of the country have been built in the South," he said. "In Arkansas, Georgia, Louisiana, Oklahoma, Texas, Tennessee and elsewhere I personally have met many of the men in charge of these Southern factories. They are progressive, energetic and conscientious in the development of this industry and manufac-

turing the finest kind of ice cream. We find our Southern factories equipped with the most modern machinery and using the best methods to turn out a product of good quality."

There is good reason to believe that the handicaps previously mentioned, and others that have hampered the growth of the industry, have been at least partly overcome. The outlook is extremely bright for continued gains in ice-cream production and consumption throughout the South and for the establishment of literally hundreds of new factories within the next few years. There are many reasons for such optimism, such as the following:

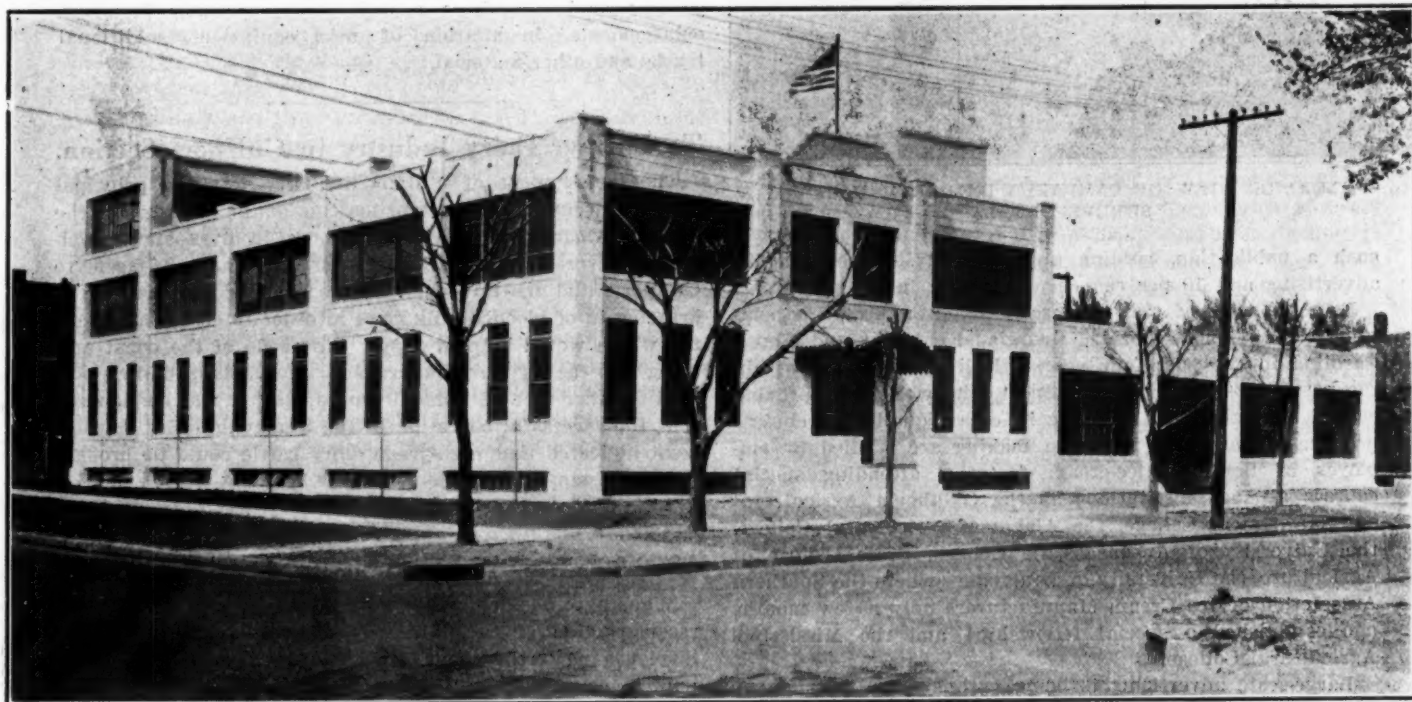
Ice-cream production in Florida in 1925 amounted to 3,466,500 gallons, or approximately 1 per cent of the total



PLANT OF THE BROOKSHIRE ICE-CREAM COMPANY AT MERIDIAN, MISS.

production for the United States. In 1924 it amounted to only 1,831,500 gallons, or 1,635,000 gallons less than the 1925 total. The one-year increase was approximately 90 per cent.

Eight of the 48 states failed to show an increase in ice-cream production last year over the year before; of these seven were in the North. Louisiana was the only Southern state in the list, a long period of unseasonable weather causing a falling off in consumption during what is normally a busy season. Production in North Carolina showed an increase from 2,268,000 gallons in 1924 to 3,417,000 gallons in



NEW \$300,000 PLANT OF THE PURITY ICE-CREAM COMPANY AT TULSA, OKLA.

1925. During the same period the per capita consumption in that state increased from .83 gallon to 1.24 gallons.

The South's production of ice cream last year amounted to 15.30 per cent of the country's total production, as compared with 14.46 per cent in 1924. In the one-year period between 1924 and 1925 Georgia's ice-cream output increased from 1,767,000 gallons to 2,547,000 gallons. The per capita consumption increased from .58 gallon to .83 gallon.

Miami, Fla., is now boldly laying claim to the distinction of being the leading ice-cream-consuming city of America, an honor formerly held without challenge by Philadelphia. According to a recent report by local officials, Miami residents last year consumed an average of six gallons each, more than twice the average of 2.8 gallons for the country as a whole.

In 1925 the per capita consumption of ice cream in Mississippi was .6 gallon, as compared with .5 gallon in 1924.

The volume of business done by one firm in Atlanta, Ga., has grown in a few years from less than \$500,000 to more than \$3,000,000 a year, in spite of increased competition.

For the first time in the history of the industry the National Association of Ice Cream manufacturers, at its 1925 convention in Detroit, named a Southern manufacturer as its president, this honor going to W. W. Campbell of Shreveport, La. He succeeded Vernon F. Hovey of Schenectady, N. Y.

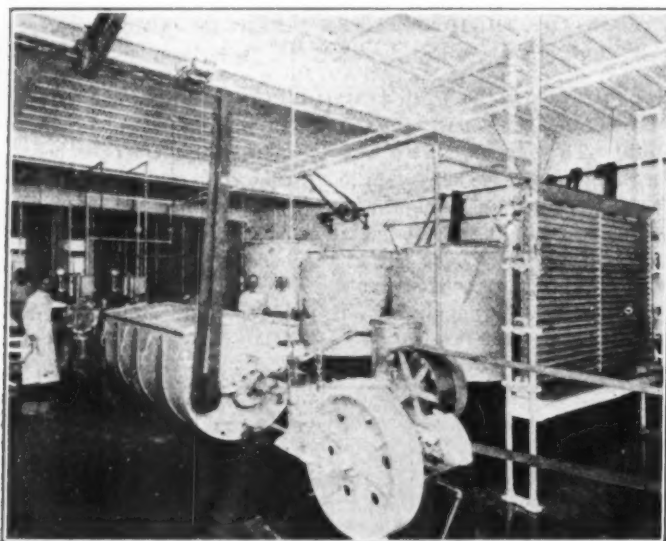
An ice-cream magazine in Atlanta, owned and edited entirely by Southerners and established less than five years ago, now has by far the largest circulation ever attained by

tive and successful advertising campaigns, such as special editions of local newspapers, ice-cream supplements, attractive booklets, etc., are frequently mentioned in the national trade journals. Mississippi, a Southern state, was the first to subscribe its quota in the national advertising campaign being conducted by the National Association of Ice Cream Manufacturers.

Southern Dairies, one of the largest ice-cream companies in the world, with the whole of America as a field for exploitation, selected the South as the section offering the best opportunity for a profitable and rapid expansion of its business.

Much of the credit for the progress made by the ice-cream industry of the South is due to the Southern Association of Ice Cream Manufacturers. It was organized in New Orleans in 1913, largely through the efforts of C. A. Kent of Kentwood, La., who had also taken a leading part in the organization of the Louisiana Association of Ice Cream Manufacturers, the oldest ice-cream men's organization in the world. Mr. Kent was elected the Southern Association's first president. A. M. Thornton of Monroe, La., now president of the Louisiana Association, was made vice-president, and B. C. Brown of New Orleans was elected secretary and treasurer. At first its scope included only the states of Louisiana, Alabama and Mississippi. Since that initial meeting the organization has grown rapidly in membership and influence. It now covers the entire South; and included among its past and present officers are many of the leading manufacturers of the country. Its president is J. D. Kinnett of Macon, Ga.; Harry Cuscaden of Louisville, Ky., is vice-president, and J. W. Clopton of Decatur, Ala., is secretary and treasurer.

No definite figures on the investment in ice-cream factories and equipment in the South are to be had, but it is estimated by Robert C. Hibben, in charge of the bureau of service and statistics of the National Association of Ice Cream Manufacturers, that the total investment for the country as a whole amounts to approximately \$400,000,000. Since the South produces approximately 15 per cent of the nation's ice cream, it would seem to be a fair assumption to estimate the investment for ice-cream manufacturing at 15 per cent of the total, or \$60,000,000. There are 4748 ice-cream factories in the 48 states and the District of Columbia. Of these 1091 are in the South. Approximately \$6,000,000 is spent every year by Southern manufacturers for new factories, enlargements, installation of new equipment, additional trucks and other material.



INTERIOR VIEW OF CAMPBELL ICE-CREAM FACTORY.
SHREVEPORT, LA.

such a publication, gaining approximately 45 per cent in advertising and 10 per cent in circulation in the past year.

Establishment of state ice-cream manufacturers' associations in Alabama, Florida, Georgia, Kentucky and South Carolina in the past four years—the last-mentioned within the past year—has given impetus to the work of improving ethical standards and bettering ice-cream quality. Technical problems involved in ice-cream making are studied by employees of Southern ice-cream factories attending special courses at such institutions as the Oklahoma Agricultural and Mechanical College, the Alabama Agricultural College, the University of Arkansas, the Georgia State College of Agriculture, the University of Louisville (where the Southern Association of Ice Cream Manufacturers only a few months ago established a special fellowship) and the Mississippi Agricultural College.

Large-scale advertising is being enthusiastically taken up by leading Southern manufacturers, some of them spending 5 cents or more per gallon for this purpose. Unusually effective

To Further Dairy Industry in Gulfport Section.

The development of a dairy industry was the principal topic of discussion at a recent meeting of the directors of the Gulfport Chamber of Commerce. Those in attendance unanimously favored the establishment of dairy farms adjacent to Gulfport, and tentative plans were outlined to further the bringing in of blooded milk cows in order to create an industry which would help to supply the needs of the coast and bring into the territory hundreds of thousands of dollars now paid to other sections for dairy products. It was emphasized that the successful operation of the Starkville dairy development indicated that high-grade dairy cattle could be brought into Mississippi and made to thrive there.

\$350,000 for Improvements to the White House.

Washington.—Bids will be received December 29 for reconstruction of the White House roof. The work will involve a new roof about 70 by 170 feet; extensive interior improvements also will be made. The architectural appearance of the building will not be altered. About \$350,000 will be expended.

Refrigerating Units for Concentrating Plants.

By GEORGE GARNER.

Number 4.

Second in importance to neither of the two other factors in the process of refrigeration and cold storage is community refrigeration, in small units, and in the development of diversified agriculture, of dairying, of poultry and egg production and of cattle-raising it will be of almost incalculable value to the South.

"The small refrigerator unit in the countryside acts as a concentrating point for the products of all the neighboring farmers, and so pyramids their small, individual supplies into a wholesale, appreciable aggregate," says Miss Pennington.

In other words, there must be developed in every agricultural community at least one such refrigerator concentrating plant, and in many cases those already established have taken the functions of co-operative establishments—grading the goods, marketing them and returning to the producers the receipts, less a reasonable deduction for expenses incurred.

Indeed, it well may happen that the little "country store" may be or may be made a concentrating plant. To this store the producer takes his wares and thence they are taken to the nearest large town or city where, in turn, these individual contributions form aggregates large enough to be handled on a commercial basis.

"From this vital need for small facilities for the swelling of these small quantities into large commercial quantities has sprung the little poultry packing house, the dairy plant and the fruithouse, all of which have served to build up the farms of the country in a unique manner," says Miss Pennington. "By far the most numerous of such establishments are the creameries, and to no other industry is refrigeration more essential. In spite of all bickerings and disagreements, in spite of the criticisms involving the creamery man, he is indispensable to the farmer—the farmer could not get along without him. Usually neither side in these arguments is 100 per cent right, and they must compose their differences for the welfare of each."

Perhaps here and there a farmer may be able to handle his output himself, but in general he needs a channel outlet, and in particular in the dairy business.

"Take a creamery as an example of small concentrating plants which need refrigeration," says Miss Pennington. "All such plants need mechanical refrigeration; they have grown beyond ice and must be equipped with refrigeration machines."

The best way for a person or a group to get a good machine is to get into touch with a manufacturer and from him obtain the details of the kind of machine which will do the best work for the purposes of the plant. Furthermore, if a man or group plans a creamery and seeks general knowledge of the two types of machines available—compression or vapor absorption—he can obtain from the United States Department of Agriculture Bulletin 98, issued by the Bureau of Animal Industry August 14, 1914, which goes into details on those subjects.

In the compression system, for instance, the gasified refrigerant is converted back into the liquid state in order that it may be used again for the purpose of absorbing heat, and this end is achieved by pressure, supplemented by a cooling system to absorb the heat from the gas. Water being the

cheapest and most convenient natural cooling medium, it is used almost entirely for this purpose. So in the compression system the main factors are a compressor, a condenser and an evaporator.

The absorption and expulsion of ammonia gas by water form the basic principle of the absorption process of refrigeration, as Uncle Sam explains. An enclosed vessel is partly filled with a solution of ammonia gas in water under high pressure. Heat is applied to this generator and the ammonia gas is driven off under pressure through the pipe into the condenser water. Then the ammonia in liquid state flows through the expansion valve into a vaporizer, where it is evaporated, this vaporization being made possible by the low pressure maintained in the evaporator.

"As the only power required by the absorption system is that necessary to circulate the various liquids, it is inconsiderable when compared with that required by the compression system," says Uncle Sam's bulletin.

On the other hand, "for small units the compression system is almost always used; the absorption system is ordinarily not as satisfactory for small units," says Miss Pennington. She adds:

"The size of the machine must be determined by reference to a machine man or by an engineer who is familiar with the work to be done, with atmospheric conditions, with the temperature of the water to be used for condensing the ammonia and with many other such details. The purchaser of refrigerating machinery must be assured that he has had good advice as to the size of machine he needs."

In general, it may be said that the tendency of the purchaser is to practice a false economy by investing in a plant which, while large enough for immediate needs, soon will prove inadequate for the demands which automatically will develop. In order to be "economical" the average purchaser spends as little as possible on the initial installation, and then in short time is likely to find that his business grows so fast that greater facilities must be provided, otherwise there will be an undersupply of refrigeration, which means a lower quality of product, and so he suffers financially in the end. The purchaser of a refrigerating machine must be sure about capacity for the future as well as for the present.

"And the machine must be installed in a proper building," says Miss Pennington. "For instance, creameries now are built from the viewpoint of sanitation, and it is difficult to keep a wooden building clean and sweet and free from odors. So the structure should be built of brick or hollow tile or concrete, and the floors of all the rooms in which milk is handled should be of concrete, never of wood."

"The modern small creamery generally has a receiving room, where the milk is poured into vats and tested, also it has a pasteurizing plant, which means that there must be a cooling system to bring the milk back to its proper temperature. There is an insulated room, too, where butter is held or hardened for tubs or prints, and the walls of that room must be insulated, the best insulation being pure corkboard. Ordinarily a wall containing four inches of pure corkboard is economical, as it holds the temperature required and keeps the atmospheric heat out sufficiently to insure no unusual strain on the refrigerating machine."

"A competent engineer always will take into consideration the kind and amount of insulation. If the insulation be good the purchaser will be safe with a smaller machine; if it be

poor he will have to install a larger machine. For economy's sake it pays to have the insulation as good as money can buy and to have it installed as well as expert labor can do the work. Insulating by corkboard should be done by an expert in such work, for those not familiar with the process will almost invariably make a poor job and will incur unnecessary expense in the end. It is a great mistake to use farm or local labor for building insulated walls in a commercial plant of any kind."

And of almost equal value in its way with the dairy concentration plant is the poultry-packing plant, especially needed because chickens in a developing rural community may become a commercial commodity before any other kind of livestock. Time was when a guest suddenly appeared on a farm the housewife rushed into the yard, grabbed a fowl almost haphazard and decapitated it as the *pièce de resistance* for the hospitable dinner.

"The quality of poultry in many of the shops of the South now is extremely poor," says Miss Pennington. "The condition of the birds sold in stores, even in the best sections of Southern cities, in most cases would be refused by the housewife in the North, who is accustomed to receiving her poultry from well-handled and well-preserved stocks. The fact that the Northern market has so much better poultry than the Southern is due fundamentally to the fact that the dressed poultry is under refrigeration from the time it is killed till it is delivered to the housewife. Seldom in these days is a barrel of ice with chickens in it seen in the markets of the North; there ice-packed poultry has been replaced by dry-packed, and the dry-packed birds are handled like beef or mutton to prevent spoilage and to maintain quality. This means that the farmer takes live chickens to the country store or small packer in town, who has mechanical refrigeration on the premises, machinery of very much the same type as is required in the small creamery. The problems of the country-store man or the small packer in town in selecting a proper machine and building insulated rooms are practically the same as the problems for creamery requirements."

And so from the icehouse on the farm through the small, mechanically refrigerated concentration plant in the country or the small town one passes to the great cold-storage warehouses in the great cities of the land, and now also in many of the lesser, the great food reservoirs into which flows thousands of small concentration streams and from which pour the aggregate supply to the consumers.

To attempt to teach any men who contemplate erecting such plants the best methods and systems to adopt would be superfluous; men investing thousands of dollars in any enterprise are likely to know something about the requirements before entering into the business. But it may be well for the housewife to take a peep into a great cold-storage plant.

For one thing, there is no ice in a cold-storage warehouse; the refrigeration is entirely mechanical. Thus there are no dampness, drippings or puddles, which might prove insubstantial. The rooms, 10 to 12 feet in height, are almost spotlessly clean; against their white walls not a speck of dirt shows. The temperature is kept at a proper level either by cold air blown in by fans or by brine below zero, circulated in pipes entirely shut off from the rooms, but still absorbing the heat, just as a steam radiator gives off heat. For carrying frozen meats or fish the temperature is kept from 32 degrees down to 5 or 10 degrees below zero, and never does it change. Proper refrigeration, sanitation and cleanliness are the outstanding features of such establishments, almost without exception.

What the three successive steps in refrigeration mean in actual dollars to the farmer and dairyman in the South—mean to the South itself and to the nation—largely has been

indicated in this series. One recalls the pedagogical methods of Mr. Squeers:

"Spell 'clean,'" he was wont to command.

"Clene," replied the pupil.

"Right; now spell 'window.'"

"Winder."

"Right again—now, go do it."

So says Uncle Sam to the South on the adoption of refrigeration.

New Feldspar Area Discovered in North Carolina.

According to the October issue of Natural Resources, published by the Department of Conservation and Development, Raleigh, a recent examination of the geological formations of Wilkes county indicates the possibilities of the exploitation of a new area in North Carolina for the production of feldspar and mica.

The survey reveals that there is a belt in the northwestern half of the county in which pegmatite dikes and granites are more or less abundant. The main belt in which these dikes occur can be traced, in a general way, from a point on the upper part of the middle branch of Lewis Fork across to Reddies River above the postoffice of the same name and near Halls Mill on Mulberry River.

Prospects for feldspar and mica in this belt were found to be promising along Reddies River and Mulberry River. Considerable indications of feldspar and mica were found on the Reddies River in an area of country nearly a mile wide a short distance above the postoffice.

Numerous faces of pegmatite material (feldspar, mica and quartz) more or less closely intermixed are exposed along the river on the new state road. While no No. 1 feldspar or mica were seen here, the area, in a general way, looks promising and is doubtless worth prospecting for feldspar and mica.

Another area of promise for the two materials is in the neighborhood of Halls Mill on Mulberry River, where, along the highway, considerable pegmatite material is exposed. Less than a mile east of the main road near Halls Mill some excellent samples of feldspar were found. Numerous exposures of pegmatite indicate that, if properly prospected, this area may yield good feldspar or mica. South and east of this point a mile or so on a rather prominent mountain are other shows of feldspar and mica which suggests the presence of mica.

Some five or six miles north and west of North Wilkesboro is another area of less width than the first mentioned which looks promising for feldspar and mica, especially mica, in places. Along Reddies River about five miles from North Wilkesboro are shows of feldspar and mica. About five or six miles due west of North Wilkesboro are some old mica prospects in which some mica of promise was seen. Also north of Wilkesboro, toward Mulberry, are shows of feldspar and kaolin.

New Glass-Decorating Plant for Weston, W. Va.

Weston, W. Va.—The new plant of the C. A. Borchert Company, which will specialize in cutting and decorating fancy glassware, will be placed in operation about January 1. As its raw materials it will use the products of the Louie Glass Company.

\$160,000 School Bonds Sold by Florida County.

Madison, Fla.—The Hardee Securities Company of Live Oak has purchased \$100,000 Madison School District bonds for par, accrued interest and a premium of \$740. Bumpus & Co., Detroit, Mich., purchased an issue of \$60,000 of the Greenville School District at 98.37 and accrued interest.

J. M. Keynes Suggests Plans for Reorganization of English Cotton Industry.

GERMAN CARTEL SYSTEM DISCUSSED—FINANCING CONDITIONS REGARDED AS IMPORTANT AS SHORT-TIME PROBLEMS.

By FREDERICK W. TATTERSALL.

Manchester, England, November 23.

What is considered to be the most practicable solution to the difficulties surrounding the English cotton industry was suggested in Manchester yesterday, when Prof. J. M. Keynes, M. A., C. B., the famous economist, addressed the members of the general committee of the Federation of Master Cotton Spinners' Associations.

Professor Keynes is a fellow and bursar of King's College, Cambridge, and editor of the *Economic Journal* since 1912; he was a member of the Royal Commission on Indian Finance and Currency in 1913-14 and the principal representative of the British Treasury at the Paris Peace Conference. He also acted as deputy for the Chancellor of the Exchequer on the Supreme Economic Council in 1919. Professor Keynes is the author of "Economic Consequence of the Peace (1919)," "Money and Foreign Exchange," etc.

This meeting was as a result of a recent article which Professor Keynes wrote in the "Nation and Athenaeum" when he criticised the short-time policy of the Master Spinners' Federation.

Following a speech by Mr. F. Mills, the chairman of the Short-Time Committee, in which he reiterated the statement that organized short-time working appeared to be the only remedy for combating the prolonged trade depression, Professor Keynes developed his objections to short time and said that it directly increased the costs of production and indirectly increased them further through steadily making worse the finances of concerns. He said the chief object of his article was to demonstrate that the necessity of curtailment of production was lasting and that the hopes with which Lancashire buoyed herself up had not been fulfilled, and consequently something else would have to be done if Lancashire was not to suffer through progressive loss of trade, as other countries could increase the number of their spindles and the scale of their organization. He stated that a policy of short time was suicidal. He said that if he were a spinner he would after five years of short time have arrived at the conclusion that short time was hopeless. He did not believe the alternative to short time was to work all spindles full time. Professor Keynes continued:

"If Lancashire cannot work her spindles full time when cotton is at its present price, she never will. In this case the thing will drag on without anyone making any profits until, I suppose, at last a large part of the industry will become bankrupt, and then the same sort of remedy will be brought about as would have come about much more quickly if there had never been any short time at all.

"I should now like to indicate the alternatives as I see them. So long as the industry was expanding pretty steadily from year to year, so long as any setbacks were only of one season or two seasons, the present organization of the cotton-spinning industry was perfectly suitable. When there was a shortage of spindles new mills would be erected and new businesses started, but consider the reverse progress. Assume for a moment that I have made good my point that some curtailment is necessary for a longish period, that Lancashire would be better off if she had fewer spindles.

There is no means whatever of getting rid of mills one by one corresponding to the method of increasing them one by one. The crude way of doing it would have been to have had no short time but cut-throat competition and the weaker one going to the wall. That corresponds to the method by which the businesses were built up. The corresponding process is that they should go out of existence by bankruptcy when business is bad, but reactions of that kind would be upon everybody."

Professor Keynes said that the plans for curtailing industry other than the process of bankrupting the weaker concerns were variations of two main types. "One type," he said, "is what the Germans call cartels. In a cartel the individual businesses maintain their separate identity. They are allotted, each of them, quotas by the cartel managers. These quotas are transferable. Thus the mills that are in a weaker position, either for finance or any other reason, are in a position to transfer their quotas to the stronger businesses. The other type which has been appropriate in certain industries are amalgamations, either complete amalgamations or more probably holding companies, which buy a great number of mills in order to close down some of them, strengthen their finance and concentrate their business on those that remain."

In elaborating the system of a cartel in application to the English cotton industry, Professor Keynes said he did not think spinners would get anything satisfactory unless there was an element of what amounted to compulsion at this point. The form compulsion can take, he said, must be mainly from the banks and public opinion as expressed through the Spinners' Federation. He would like to see all the spinning mills in the American section formed by compulsion of that kind into a single cartel with cartel managers. The cartel managers would allot each mill a quota of production presumably based on aggregate spindleage agreed in any way that was necessary. This system of cartels differed from short time inasmuch as it was compulsory and the mills would have to send statistics on all relevant points to the cartel managers and the quotas would be transferable. Therefore, a mill could sell its quota to another mill, so that there would be certain mills working full time and others closed down. He would like to see the banks withdraw credit from any mill that would not come into this sort of cartel. He would have compulsion absolute up to that point. Under this system the bad mills would be treated more tenderly than any other system, because in their quota they would be given something salable.

The next step would be for the stronger and more enterprising firms within the cartel to aim voluntarily and on their own initiative at forming considerable holding companies. These would give wider scope to the most efficient leaders of the industry and would facilitate standardization of products and the formation of more efficient selling organizations and selling policy. Another point would be that such amalgamations would be in a position to appeal for capital to the outside world. He could conceive these amalgamations raising a considerable quantity of capital at a fair rate of interest, paying off the more extravagant loans of its subsidiaries, whether to banks or brokers or to others, and, above all, having additional resources beyond what were

required to pay off the most burdensome loans to make it possible to carry stocks of raw cotton and of yarn at present prices.

He believed that if Lancashire went through the present period of abnormally cheap cotton without adequate finan-

cial resources she would lose millions of pounds which she would otherwise secure.

Professor Keynes wound up by saying he was convinced that the financial situation in Lancashire was at least as big a factor as short time.

English Views on the Cotton Situation and How to Stabilize Cotton Prices.

In connection with the foregoing Manchester letter, giving the views of J. M. Keynes on the Lancashire situation, we have from Sir Charles Macara copies of several letters written to the Evening Chronicle of Manchester by George Moores, honorary secretary of the 1906 Lancashire Private Cotton Investigation Commission to the American cotton fields. Mr. Moores' letters, which we are publishing in the order of their appearance in the Manchester Chronicle, discuss the subject from an English standpoint and show how the low price of American cotton may kill the development of cotton growing in the British dominions.

Mr. Moores suggests a combination between the British and the American Governments to stabilize the price of cotton at a figure which would yield a fair profit to the grower and to the cotton manufacturer alike. The proposition is one which it would be extremely difficult to carry out; probably impossible; for the American Government cannot deal with the cotton situation in the way in which the British Government has dealt with rubber and which receives Mr. Moores' hearty commendation and likewise ours, for it saved the rubber industry and the rubber grower. Nevertheless, the attention being given in Manchester to that phase of the cotton situation is of world-wide interest, for the situation there affects not only the cotton trade of the United States, but the question of cotton growing in all other countries.

Mr. Moores' letters taken in connection with our Manchester letter will prove extremely interesting to everybody in America concerned as to the cotton trade. Mr. Moores' letters follow in the order in which they were printed, the last two letters apparently being a reply to criticisms raised in Manchester against his views:

First Letter.

"Half a million bales of cotton on top of the prodigious American crop of which we have had several months' knowledge!

"Little wonder Sir Charles Macara has again seen fit to appeal to the business interests of the country to give heed to a position never before equaled in the history of the world-wide industry. The serious depression from which Lancashire is still suffering with a superabundance of raw material in sight is being perpetuated, why? Because buyers are waiting to see the ultimate market price of cotton. This holding off would cease were cotton stabilized, as it must be in a way, even if in the process American planters, with the support of their Government and banks, withhold millions of bales from the market and reduce next season's acreage. But such a course would not be to the permanent advantage of anyone.

"Among the various interests concerned, none is likely to suffer more than us by such methods, for we still possess the mills and the men to run them against all competitors in the markets of the world. Having regard to this well-established fact, are we, the people of Lancashire and the Government of the country, to remain indifferent, contenting ourselves to watch the fat years and the lean years of cotton go by without any effort at scientific organization?

"Surely this cannot be the limit of national ingenuity in a business unmatched in importance by any other in the country and the permanent prosperity of which is vital to the nation.

"Let us consider the position as it presents itself to any person of experience and wisdom. If we do not move for the

definite stabilization of cotton, and effect it before the next planting season, cotton may reach a figure which will leave next to nothing to the American planter and for many years retard the Empire cotton-growing movement nurtured with such care by the British Cotton Growing Association under the leadership of Lord Derby. Who could blame the African natives if they imitated the American planter and restricted the acreage until they could secure an economic price for their crop?

"I cannot forget a conversation I had some 20 years since on the occasion of one of several visits to the states with a highly educated Nigerian, then on a visit to the Agricultural Bureau at Washington. He informed me that his father in the middle of last century was growing cotton quite extensively, as were other natives, encouraged by a movement strongly supported by our Prince Consort, who in pursuit of that interest visited Manchester and other Lancashire cotton centers. After the American Civil War and the consequent cotton panic, cheap American cotton was once more to be had. The Nigerians had grown a comparatively extensive crop, but when they appealed to Lancashire to buy as previously, or say what was to be done with it, they were informed, he told me in all seriousness, that 'they could eat it.'

"That killed African cotton growing for a couple of generations, and the knowledge of this treatment handed down from father and grandfather seriously handicapped the earlier efforts of the present British Cotton Growing Association. Some little time since, in conversation with Sir Joseph Cooke, the High Commissioner for Australia, he was telling me with some degree of pride the success being achieved by Queensland in cotton growing, and seemed surprised when I informed him that Australia's production was scarcely sufficient to keep one good Oldham cotton mill running for 12 months.

"What was the fundamental difficulty there? The need of a stable price on which the cultivator can rely.

"Given a fixed price which will pay the cotton farmer and on which he can depend, Queensland will produce plenty of cotton for you,' was his final remark.

"With the cotton in prospect, Lancashire must surely resume full-time working in the near future, but if we consent by default, foolishly, to any policy of restricting growth, prosperity can only be temporary.

"Is it not greater wisdom to get our oars in now and, by international action, fix a price for cotton, in co-operation with the grower, and thus ensure the permanent prosperity of our country?

"We are familiar with the cotton spinners' fixed-price scheme as regards the American spinning section—probably a fair enough expedient in present circumstances, but at best an expedient in the direction of stabilizing minimum prices on the Manchester market and of trifling significance compared with the great opportunity now available of fixing a minimum world price for the raw material.

"Under the Stevenson restriction scheme as affecting the rubber industry, we have seen a kindred problem to that confronting the cotton industry solved to the satisfaction of the rubber industry—planter and user alike. When we consider the important part this country plays in the cotton industry, is it absurd to ask whether there is not some similar course before us which, assiduously pursued, would be to the continual advantage of the cotton industry?

"It is impossible for any one man to formulate a policy which he can rely on as acceptable. Other minds brought to bear on this great issue could conceivably produce one much better, but, personally, as there are only a few months available for effective action, I take the liberty of sketching a scheme which would appear to me pregnant with practical possibilities.

"The issue is, to my mind, of such tremendous national consequence that the Lancashire group in Parliament should make it their business to wait on the president of the Board of Trade and urge him to visit Lancashire, to confer with the Spinners and Manufacturers' Associations and with individual

leaders of great businesses, including the big four in banking, and then move on to the International Federation of Cotton Spinners and Manufacturers.

"Having come to some concrete terms on this side, then let a small delegation proceed at once to Washington to confer with the Government, the bankers and the planters, and arrange matters on some basis of equity satisfactory to all concerned which would lead not to a reduction, but to an increase of the acreage planted there as well as in all our Empire fields.

"We want American cotton. In abundance at a low price—but it must be a price that will pay the planter. Cheap cotton is the life-blood of Lancashire industry, for we supply millions of the poorest inhabitants of the world with all the clothing they have. It is clearly our duty to get the planter and the user of cotton together, and I am satisfied we shall then find the real highway to safety, security and continued prosperity."

Second Letter.

"We shall probably all agree with a well-known economist who, in a recent article, tells us that a fortunate accident (cheap cotton) 'has given Lancashire a breathing space in which to reorganize her affairs.'

"What are we going to do about it? Is it to be reorganization or is it to be a *laissez faire* policy? Must we fold our arms and hold the easy, pleasant belief that supply and demand will do all that is necessary?

"When I wrote on stabilizing the prices of raw cotton, I did not lose sight of the fact that this is only one of several reforms which require introducing into our staple industry, the sum total of which will produce efficiency.

"But it is one of the first that should be carried out, and it is a matter of urgency, which should be dealt with effectually before next planting season. The breathing space may last two or three years so that other items can be dealt with later. Surely it would be better for us to have a voice in stabilizing prices, and, having regard to the valuable work done by the B. C. G. A., it would be better for us not to depress prices unduly.

"If Lancashire spinners can buy American cotton at any price under cost of production, say at 5d. a pound, will they give 6d. for African or Australian? No! The law of supply and demand will operate.

"The United States' crop, we know, is so much bigger than the total of our Empire crops that if prices are not regulated or stabilized on a paying basis we could buy the American cotton for a whole season at prices which would not permit our Empire fields to compete. What, then, could the Empire producers do with their season's yield?

"To my mind, we are doing the greatest disservice to the B. C. G. A. if we leave America to stabilize prices.

"We grow cotton as well as they, and we must pay the grower in whatever part of the world he may be, and not gloat over the prospects of five-penny cotton one year and weep over the prospects of fifteen-penny cotton another.

"Something like stability would be good for Lancashire trade. Very true. We all know it, but what are we doing to bring it about? Haven't we had talking enough in the last three or four years over the deplorable state of the cotton trade? Let us have some action.

"We cannot rely on those who take a short view of the industry. It seems almost a certainty that with the cotton in prospect all our spindles must very soon be working full time, and to the short-sighted all will be well as long as it lasts.

"It is to those who take a long view of the trade of Lancashire, of the cotton-growing capacities of our Empire fields, of the welfare of our operatives in full and steady occupation, that I appeal.

"As certain as times are bad today in the cotton trade, bad times will come round again if we do not organize and become efficient in our business.

"I repeat, general stabilization of the prices of raw cotton is a necessity for us.

"If we knew that today miners' wages, on a basis satisfactory to all concerned, were to be stabilized for seven years, what a thrill of confidence there would be throughout the country, not least amongst the cotton spinners, manufacturers and allied trades! Thanks to the splendid co-operative work done by the federations and the operatives' organizations in the cotton trade, we have stability in wages. Let us have it, as near as we can get it, in our raw material.

"Stabilizing of our costs will help the producers, and it will give confidence to the buyers, especially to those on whom we rely for large forward contracts."

Third Letter.

"Colonel Shute concedes my point entirely in the last part of his letter. He tells us that the consumptive power of the world can be closely estimated, but that no living man can estimate what the productive capacity will be in any one year. Exactly!

"Therein lies the strongest possible reason why there should be some method of storing when the crop is big against the time when the crop is little.

"Take the last dozen years. Prices have varied from 4d. to 4s. in round figures. I grant the times have been exceptional owing to the war, but variations need not occur greater than a few cents per pound.

"The alternative to stabilized prices (which Colonel Shute puts forward) is surprising. Presuming that Colonel Shute knows the financial condition of Lancashire mills, how can he expect spinners to cover themselves for two years?

"Apart from the wisdom of such covering by any firm financially able to carry it out, what will the banks say to others who look for their support?

"A cotton that costs 9d. today cost 7½d. in the immediate pre-war period, and, as Colonel Shute intimates, no man living can tell whether it will not be 7½d. again next year.

"The action of individual firms in this business is comparatively of no account. The question is big enough for the United States and British Governments to take up in the interests of their respective countries. Why should there be such an opportunity for gambling in raw cotton? It is estimated that for every bale grown 30 are sold. Mr. Hoover. I think it was, said that one-third of the price of cotton to the spinner was due to these extraneous efforts to sell and resell.

"The present opportunity for doing something by the combined efforts of this country and the United States should not be missed, and it should be done without loss of time."

Suggests Government Control of Acreage and Shows Great Britain's Method.

The A. P. Brantley Company.

Blackshear, Georgia.

Editor Manufacturers Record:

Those of us who read the daily papers have during the past several years learned of the continual agitation for farm relief. I suppose the next farmers who will now be clamoring for relief will be the cotton farmers of the South. Our cotton farmers, in spite of advice to the contrary, went out and planted an acreage which is going to produce more cotton in the crop of 1926 than the world needs, and, responding to the inevitable, the market has declined, as it always does decline when any great commodity, whether cotton, wheat, corn, etc., is produced in greater abundance than the demand of the world for the crop, whatever it may be.

Doubtless you are familiar with the way the British Government handles the Egyptian crop in Egypt. My information may not be exactly correct, but I think it is practically so. When there is a great overproduction of this Egyptian cotton and the price gets below the cost of production, the British Government goes in and buys at the market price a certain percentage of the crop until the price is stabilized; then it continues to buy if the market declines below a certain point. Following this, it issues a drastic decree restricting the acreage to be planted in cotton the coming year, and, as anybody can readily see, the British Government doesn't lose anything by buying cotton, but, on the contrary, makes money, and, in addition, stabilizes the price of the crop out of which they are buying, and by restricting the acreage the coming year the price for this cotton invariably advances.

I noticed in the press recently the following:

"Today London advised that a Cairo dispatch says the Egyptian Cabinet has decided to issue a decree limiting the cotton acreage to two-thirds of the present acreage for three years."

I think we have heard altogether too much about co-opera-

tive marketing—for the reason that many farmers get the impression that co-operative marketing will solve all their difficulties in respect to price—and in the case of a great staple crop like cotton, which is non-perishable, little can be accomplished by co-operative marketing, but a vast deal could be accomplished by co-operative production.

If our farmers will co-operate in production, no matter what the crop is, there will be no need for co-operative marketing, because the crop of any commodity whatever will bring all the farmer could reasonably desire the crop to bring, if he will only not overproduce, but if he insists on overproduction, then the only remedy as our law now stands is through disaster. This disaster is now present with us in the South. The cotton crop of 1926 is easily going to cost the South a half-billion dollars. I mean by this that the crop is going to cost the South a half-billion dollars more than they are going to get for it.

I believe the farmers of great staple crops would welcome regulation by the Government of the acreage to be planted, as they would trust the Government and would be guided by the Government, because they would understand that the Government would naturally want them to plant all they could safely plant but would not want them to plant an acreage sufficient to bring about overproduction.

Such an attempt to regulate acreage would be a good deal like the Interstate Commerce Commission, which regulates not only the rates that may be charged for freight and passenger service but goes further and regulates the building of railroads. The Interstate Commerce Commission will not permit the building of a railroad that it considers unnecessary and which may be harmful to some line already in existence; in other words, it will not permit unlimited, unrestrained and unrestricted competition among railroads. But for the Commission there would be today the same condition in railroads as in agriculture.

It is a matter of common knowledge what the British Government has accomplished for the rubber industry by restricting production and what the Brazilian Government has accomplished for coffee.

Unregulated production will bring disaster to any industry. We can bring back agricultural prosperity by regulating the acreage of the great staple crops, or we can go on as we have in the past and regulate production by disaster. The latter is the only known method up to the present, and, of course, it works, but it works slowly and causes untold suffering and losses. The present price of cotton will bring its own corrective, but this is an enormously costly business.

A. P. BRANTLEY.

North Carolina Sells \$10,000,000 of Bonds.

Raleigh, N. C.—Bonds in the amount of \$10,000,000 have been sold by the state of North Carolina, R. B. Lacy, State Treasurer, to the First National Bank, the National City Company and the Bankers' Trust Company, all of New York, on a bid of par. The issue will consist of \$5,000,000 school bonds and \$5,000,000 of highway bonds. The state originally intended to sell \$20,000,000 of 4¼ and 4½ per cent bonds, but after a consideration of bids decided to sell only the 4¼ per cent bonds.

\$1,000,000 Bond Issue Proposed for Columbia, South Carolina.

Columbia, S. C.—Petitions have been signed requesting an election on the issuance of \$1,000,000 bonds for street paving and for the construction of storm drains. The main streets of the city not yet paved will be provided for if the election carries, and lands now subject to overflow will be reclaimed by the extension of the storm-drainage system.

Oklahoma Developing Its Plans for Cotton-Acreage Reduction.

Oklahoma City, December 3—[Special.]—In line with its already working plan to withdraw 400,000 bales of cotton from the market, Oklahoma will seek to reduce its cotton acreage in 1927 by one-third by obtaining pledges of reduction from individual farmers. Bankers, merchants and business men will be asked to join in the general drive to take place during the week following January 17. Between now and then an educational campaign, covering the 53 cotton-producing counties of the state, will inform farmers of the economic soundness of the plan.

These decisions were reached here on November 24 at a meeting of bankers, business men and farmers, resulting from an earlier conference with Eugene Meyer, Jr., chairman of President Coolidge's cotton-relief committee. A committee of 11 bankers, in charge with the Oklahoma Cotton Growers Association of the holding pool that will keep cotton from the market about twenty months, named Eugene P. Gum, secretary of the Oklahoma Bankers Association, chairman of a cotton-acreage committee, as a sub-committee of the state central group.

It was this sub-committee that on November 24 formed a definite, workable plan for cotton reduction. As in the withholding of cotton, it again is to use already working machinery, this time of the Oklahoma Bankers Association. Through the association members all over the state there will operate county committees composed of two bankers, the county farm agent, home demonstration agent, the superintendent of schools, a newspaper man, a merchant, a landlord, a tenant, an official of the county chamber of commerce and one minister. Each county committee will be charged with organizing committees of five in every township in the state; these, in turn, will make arrangements for meetings in the country schools in cotton-producing areas.

Speakers from the Bankers Association, local business organizations, the Oklahoma Agricultural and Mechanical College, the Farmers Union, the Oklahoma Cotton Growers Association and other speakers available will go into these sections, lay the plan before the farmers and ask for signatures to cut at least 33⅓ per cent.

These pledges will be followed up at planting time.

Efforts will be made to get farmers to plant more food for the family and stock, to raise more hogs and cattle in place of the abandoned cotton acreage.

The cotton-acreage-reduction committee is composed of the following, all leaders in their respective business and professions: Eugene P. Gum, secretary of the Oklahoma Bankers Association; E. D. Kilpatrick, Le Flore, Okla., president of the Bankers Association; Harry H. Leaming, treasurer of the Oklahoma Cotton Growers Association; Carl Williams, Oklahoma City, editor of the Oklahoma Farmer-Stockman; Walter M. Harrison, Oklahoma City, managing editor of the Daily Oklahoman; John Simpson, Oklahoma City, president of the Oklahoma Farmers Union; John Whitehurst, president of the State Board of Agriculture; Harry Cordell, president-elect of the board; Dr. Bradford Knapp, president of the Oklahoma Agricultural and Mechanical College, Stillwater; E. J. Litteer, Hugo, chairman of the agricultural committee of the Bankers Association; Gerson S. Weitzenhoffer, vice-president of the Security National Bank, Oklahoma City; N. R. Graham, Tulsa, president of the State Chamber of Commerce, and Mel A. Nash, state superintendent of education.

Thirteen carloads of hogs were sold by farmers of Chowan county, North Carolina, this year, bringing in over \$20,000, reports County Agent N. K. Rowell.

"Back to Earth," Florida's New Drama of Progress.

By W. BRECKINRIDGE ESTES, Sarasota Chamber of Commerce, Sarasota, Fla.

The Florida "bubble," as it has been termed, burst as a result of overinflation, which was a natural result to be expected. Theoretically, the laws of diminishing returns took their inevitable course. It was the "pyramiding" of values that brought a legitimized gamble to an end and caused Florida to pause for a retrospection, which resulted in an "Inventory Congress," at which an introspection was taken, and the forecast predicts a splendid change for the better. Realty sales are going to improve, because values are becoming stabilized, which is motivating solid, permanent development; well defined and sound subdivisions, too, are taking on a new impetus under the able direction of experienced realtors.

In spite of the adverse propaganda and restraining orders that are in effect in some states, Florida's business men are gaining the confidence of the people everywhere.

It is frankly admitted that there has been an exodus of people, they began leaving Florida during the holiday season of 1925, but the great majority of these never came to stay. They came to gamble in real estate, not to make Florida their home, not to build homes and cities and help to build up a great state by assisting in the profitable exploitation of its vast resources.

People who purchased Florida properties during the so-called "boom" with the anticipation of selling at the peak, but whose desires were never realized, have concluded that an idle lot is not a revenue-bearing investment. The consequence is that their actions have been governed by their sense of economy, and they have begun to utilize the idle property by converting it into a dividend-paying proposition. To do this they have had to build either business structures or dwellings, and the degree with which they have proceeded and succeeded can best be measured by Florida's construction program, which, as reflected in the building permits issued throughout the state during the past 10 months, totaled \$184,223,000 and is exceeded only by New York, Michigan, Illinois, Pennsylvania, Ohio and California, states which contain the largest cities in the country. This means that the wheels of industry and commerce throughout the nation have been kept turning at a faster pace than otherwise because of Florida's new era of progressiveness.

According to accurate statistics compiled for the first 10 months of 1926, Florida consumed \$11,497,570 worth of beef and veal, \$16,169,330 worth of pork and bacon, \$2,666,390 worth of lard, \$1,423,330 worth of lamb, \$20,020,923 of dairy products, \$5,426,660 of poultry, \$3,750,000 of eggs and \$35,000,000 worth of grain, hay, condensed feeds, flour, meal, canned goods, fruits and vegetables, all of which were produced outside of Florida and consumed in addition to that produced within the state, the sum total of which aggregates approximately \$95,954,203. The authority for these figures, L. M. Rhodes, State Marketing Commissioner, says that this would cause quite a deficit in our finances if we shipped out nothing in return, but Florida's farms and groves yield approximately \$85,000,000. The output of its factories and sawmills amounts to from \$180,000,000 to \$215,000,000. Its naval stores add \$20,000,000 to its income annually. Its fishermen swell the bank account to \$15,000,000 yearly. Its minerals add \$16,000,000 to the annual receipts and its tourists from \$125,000,000 to \$150,000,000, from all of which Florida is gaining ground daily.

The foregoing figures do not take into account the automobiles and accessories that are used in Florida, the vast amount of furniture and household commodities, wearing apparel and other necessities of life, for which the state depends upon the manufacturing and distributing centers of

the country at large. With these concrete facts it seems unreasonable that the manufacturers and distributors, located in states whose newspapers and periodicals have decried and maligned Florida conditions, would tolerate such a thing.

Florida is now setting the stage for a new drama; a new audience is being appealed to. The play will be in many acts and continuous, with a frequent change of scenery. The name of the new Florida drama is "Back to Earth"; the stage setting is Nature, glorified by Providence. The first setting is recreation, and this has never been denied recognition in Florida. Unquestionably, Florida's greatest asset is its most healthful climate, its beautiful bays, beaches, lakes and its tropical environment.

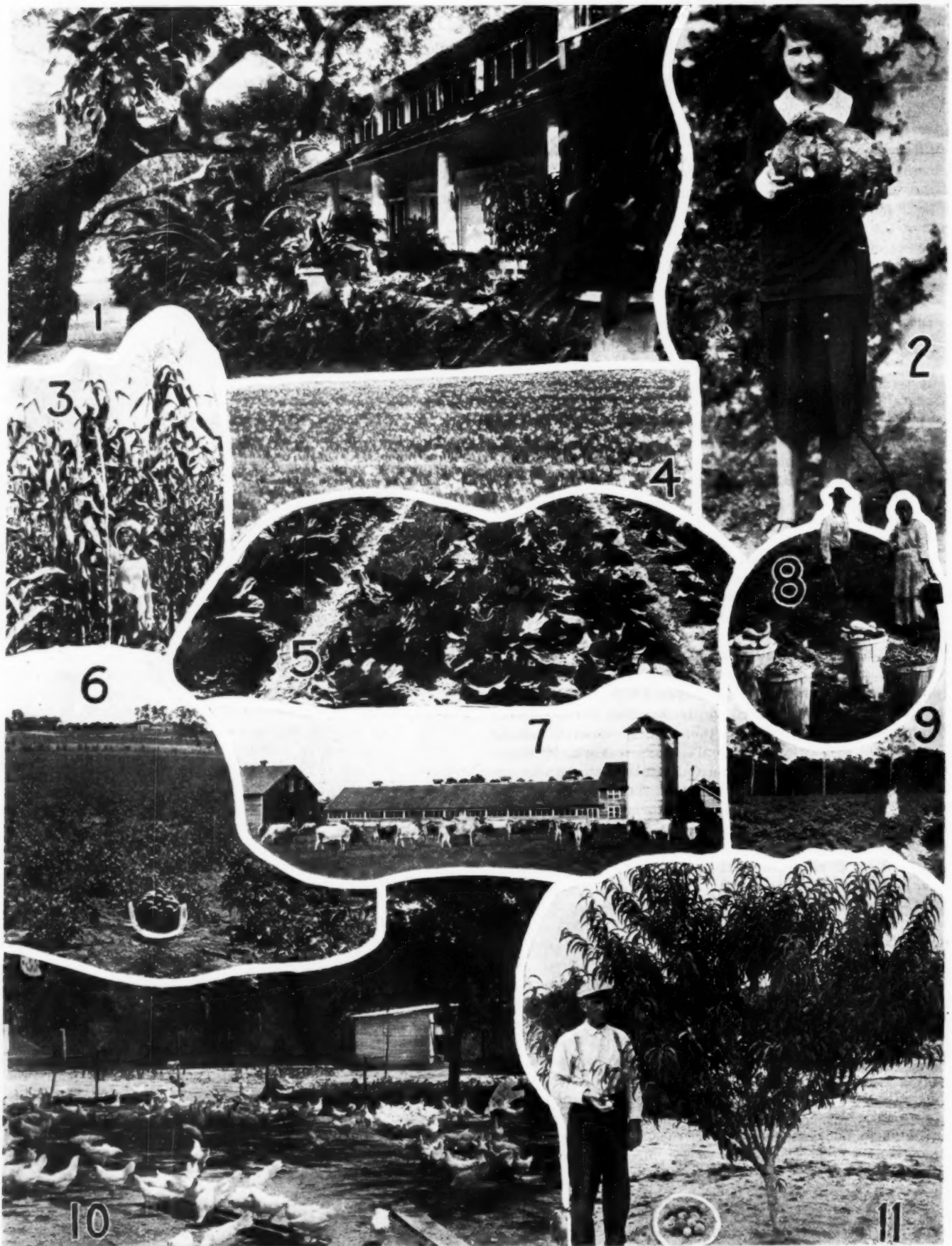
The continuity of that which follows is simple. Those who come for the purpose of enjoying an outing or recreational facilities at once sense the requirements of the state and the advantages it offers: Factories and distributing plants of all kinds; here the successful farmer sees his opportunity to raise some of the vast amount of products purchased by Florida from Northern and Eastern states, and one by one new smokestacks are arising in the skylines of the various communities, and the plough, sow, cow and hen are finding a place and a role in Florida's new pageant of progress.

On the west coast of Florida, in Sarasota county, we find the Potter Palmer Institution—well known throughout Chicago and the Mid-West—irrigating and making ready for farm purposes a vast area of what was once waste land. The Brotherhood of Locomotive Engineers are converting Venice, once a turpentine forest, into a veritable paradise. These two projects, alone, represent more than \$25,000,000, and what is true of the west coast is also true of the northern and eastern sections.

"Just what is going to be your 'modus operandi' in undertaking to bring new farmers and industries to your community?" is a question frequently asked, and the consensus of replies amounted to about this: "We are going to advertise to the nation, and illustrate our contention that the farmers of the far North, who, because of climate, are limited to five or six months in the year of actual farm operation, are translating their high-priced acreage into more acres of equally as good farming land in Florida and are, therefore, minus their large coal bill and minus their yet larger food bill for their cattle in the winter time, and are plus an opportunity to grow two or three crops instead of one. Further, we will point out to them that when they are growing their crops in Florida, the things they are producing are 'out of season' in 46 other states and, therefore, command the highest market prices.

"We will remind the people not to undervalue Florida sunshine. We will say to them that a manufacturer runs his plant because he can sell his product at a profit and that the merchant stocks his shelves with goods for identically the same reason. That Providence has seemed to give to Florida a patent in perpetuity on sunshine in the winter time. That the evidence of the past 25 years is conclusive that more and more people from all over the American Continent really want that sunshine in the winter time. They come to get it, realizing that as the doors and windows of their homes and places of business are closed against the rigors of winter, disease and illness follow. Heating, wherever they might be, cannot compete with God's open air for health-giving qualities, and the people who come into this semi-tropical climate must be fed. The wheels of local industry must turn. That people are actually buying homesites, farm lands and industrial sites for this sunshine, and that, all in all, the climate

Some of the Products Which Help to Make Florida Prosperous



1—Entrance to the famous Potter Palmer estates, Sarasota. 2—"Peaches" and potatoes of the Daytona Beach variety. 3—A Sarasota county cornfield. 4—White narcissus, Daytona Beach. 5—A field of cabbage near Daytona. 6—Typical tomato ranch near Lakeland. 7—A Columbia county dairy scene near Lake City. 8—Profitable contentment for the aged, Lake City. 9—Sarasota county eggplant field. 10—One of the many Columbia county poultry farms. 11—Polk county peach orchard near Lakeland.



AGRICULTURAL SKETCH MAP OF FLORIDA.

1—Deep dry sand, including scrub. 2—Sandy uplands with clay subsoil. 3—Flatwoods with clay or hardpan subsoil. 4—Flatwoods with calcareous or phosphatic subsoil. 5—Miscellaneous hammocks. 6—Red loam, non-calcareous. 7—Red loam, calcareous or phosphatic. 8—Limestone. 9—Marl. 10—Muck. 11—Miscellaneous coast soils.

and sunshine of Florida have just as much of a real asset value as have diamonds on the shelves of Tiffany & Co.

The accompanying agricultural sketch map, with its legend, will be of interest to many people who are constantly requesting similar information from the various civic bodies in the state. The map has been carefully reproduced from a Governmental survey, and is authentic.

During the speculative season Florida hotels and apartment houses did charge abnormal and tremendous prices for accommodations offered. These fabulous sums were created by the laws of supply and demand. The people who paid the prices, in the majority of cases, did so with the same spirit that they would occupy a seat on the stock exchange in Wall Street. They were, unquestionably, trying the Monte Carlo method of "getting rich quick." Few people would complain of paying \$15 a day for a place of abode against the odds that they were speculating with, and in most instances, winning. But now conditions have changed. Hotel and apartment house rates have been reduced and guaranteed throughout the state. Taking Sarasota, my home, as a criterion, over one thousand rooms have been added to the city's lists of hotels, beautiful and comfortable apartments and dwellings have been erected, summer and winter rates have been published and filed with the Chamber of Commerce, and

reflect, in most instances, about a 50 per cent decrease over last year. Coupling these facts with the increased and bettered service, the elimination of the embargo, the improvements of roads and streets throughout the state, the vast amount of construction that is going on, the new industries and places of business that have been established and that are continuing to be built, the new farmers that are coming to all sections, one can truly say that which has happened has been for the best, and that Florida today is more than ever the Land of Golden Opportunities.

Apropos of the storm, little need be added to the accurate analysis made by the editor of the MANUFACTURERS RECORD, who predicted a few days after the storm that Florida would come through stronger than ever. It is only necessary to say that this prediction has already become a truth.

The things needed to turn more real estate in Florida today are ploughs and modern farm machinery and honest-to-goodness dirt farmers, who will supply Florida's ever-growing population with the necessities of life that can be profitably produced in the state.

Mr. Schwab Predicts World's Greatest Steel Plant in Baltimore.

Prediction, amounting almost to promise, that within 10 years the plant of the Bethlehem Steel Company at Sparrows Point, Baltimore, will be expanded into the largest steel plant in the world was voiced by Charles M. Schwab, chairman of the board of the Bethlehem Steel Company, at an anniversary dinner given last week in his honor in Baltimore by the local Association of Commerce. Allen D. Albert, president of the Jacksonville Gas Company, also addressed the 750 members and guests who were present.

Just 10 years before, also at a dinner in his honor, Mr. Schwab had promised Baltimore and the South that his company would spend \$50,000,000 in development of the Sparrows Point plant in Baltimore. As he put it in his speech at the banquet:

"As I stand here my mind goes back to the dinner ten years ago, when I expressed aloud a dream I had for Baltimore. Before the dinner ten years ago I took Mayor Preston up a hill and unfolded to him my plans. I believe he then was incredulous, and only hoped that half the dream might come true. But tonight I return to you with the full satisfaction of saying that the dream I dreamed then has more than come true.

"Now I am going to dream again, and in 10 years I hope I shall be able to come back to you and again point out the fulfillment of my dream. Sparrows Point and the adjacent property around Baltimore will be turned into the greatest steel works in the world by my boy, W. Frank Roberts, superintendent of the Sparrows Point plant.

"Mr. Roberts will make Sparrows Point the greatest works in existence, as I have dreamed it. It will be even greater than Pittsburgh.

"Only today Mr. Roberts told me he had just opened the sixtieth mill at the plant; I told him my happiness would not be complete until he has opened the one hundredth mill. I shall be happy then, because it will be a realization of my dream, and as my days grow shorter in number I am anxious to have that dream realized."

Furthermore, Mr. Schwab continued:

"Several years ago we bought the Baltimore Dry Docks and Shipbuilding Company shipyard, which then was not making money. Today it is turning a nice profit over to us, and only a short time ago Vice-President H. E. Lewis of Bethlehem Steel asked for several more million dollars for further expansion for his shipyard."

"And that is what we are going to do. That is the way the Bethlehem Steel Corporation has grown. When I took it over, twenty-three years ago, it was worth about half of the \$15,000,000 we paid for it; today its value is over \$600,000,000."

Mr. Albert pointed out that the growth of cities depends on two things—the growth of the area around a city and served by that city, and the distance of large cities from each other. Diversification of industry also was stressed by him in discussing Baltimore's advantages, possibilities and prospects, and also he emphasized the need for retention of the city's "cultural tradition" and its friendly atmosphere of "neighborliness."

The dinner also marked the institution of a campaign for increase in the membership of the association. President James Cary Martien acted as toastmaster and the guests of honor were welcomed by Governor Albert C. Ritchie for the state and Mayor Howard W. Jackson for the city.

Before the dinner a comprehensive inspection of the harbor of Baltimore, now the third largest port in the United States, was made by Gen. A. C. Dalton, president of the Federal Emergency Fleet Corporation, accompanied by J. Harry Philbin, a vice-president of the corporation, and Jeffer-

son Myers and Philip S. Teller, members of the United States Shipping Board. It was indicated after the trip that recommendations will be made to Congress which will result in improving the Baltimore facilities still more and in bringing faster ships into the Baltimore service and otherwise developing the present port service.

The Federal officials also attended the banquet.

\$500,000 Dredge in Operation on Harbor Development at Lake Mabel, Florida.

The big dredge built by the Ellicott Machine Corporation of Baltimore for work in Florida on the Lake Mabel harbor project, the future port of Fort Lauderdale and Hollywood, has recently been delivered and placed in operation. The machine is capable of excavating any material and is, designed to dig a harbor and channel from solid rock, which lies under the sand on the floor of the cove. The dredge weighs 1000 tons and is 175 feet long and 45 feet wide. It is steam driven, burning oil, and develops 2000 horsepower. Stone-cutting equipment is at the contact point of the sucker. The hull is of steel. The engines are of such power that the material dug from beneath the water by the agitator and suction apparatus may be pumped through pipe more than two miles in length, without the use of relays, throwing



DREDGE "GENERAL" AT WORK ON HOLLYWOOD PROJECT.

ashore between 1500 and 2000 cubic yards of material an hour. Self-registering instruments keep an accurate check on the amount of work being done.

The dredge represents an investment of about \$500,000. It has been named "General," in honor of General Goethals, Army engineer, who helped build the Panama Canal across the narrow isthmus to connect the two oceans, and who is consulting engineer on the Lake Mabel harbor project.

By means of a flexible pipe line laid on the floats from the dredge to the shore, it is possible to pump the dug-up silt into adjoining marsh lands, and thereby reclaiming and filling in much valuable land. A preliminary trial at Fort McHenry, near Baltimore, proved highly satisfactory. With this dredge the work of developing and repairing will go forward rapidly.

The Lake Mabel project is a co-operative affair, financed by the city of Fort Lauderdale, the city of Hollywood and the J. W. Young interests. Two million dollars is being supplied by each party and the supervision of the building will be in the hands of citizen committees from the two cities. The site of the harbor is in Lake Mabel, not far from the business section of Fort Lauderdale, and only a few miles from the center of the business section of Hollywood.

An inlet is being cut directly east from the lake to the ocean. In addition, a channel will be dug from Lake Mabel harbor to New River, a distance of approximately one mile, giving access to the harbor through their present inlet in the New River sound. The channel proper will be 200 feet wide and 35 feet deep and there will be a turning basin for the

first unit, which will be completed with the \$6,000,000. The turning basin is 1200 feet square and 35 feet deep. Ships and dock spaces have been awarded to the cities of Fort Lauderdale and Hollywood on the western edge of the lake.

The Dixie highway runs perpendicular to a line drawn parallel to the channel and is approximately three-quarters of a mile west of the lake. The Florida East Coast and Seaboard Air Line railroads are both within two and four miles, respectively, of the harbor site. Terminal facilities have been provided for. Lake Mabel itself has a 500-acre area and is capable of indefinite expansion as time goes on and conditions warrant.

Seed Time in Advertising Will Be Followed by Harvest.

Believers in Jacksonville.

Jacksonville, Fla., November 29.

Editor Manufacturers Record:

In President Coolidge's recent address on advertising there appears this interesting observation:

"We cannot tell what a particular month or locality may develop, but over the broad face of our country seed time will be followed by the harvest, the productive capacity will increase and our people will become more prosperous."

If President Coolidge had had Florida in mind, which, of course, he did not have, he could not have spoken more significantly; for it is applicable in every sense of the word to this state. It is a comforting thought to a Commonwealth which, in the face of boom reaction, bank failures and hurricane, is carrying on in characteristic style and challenging the future with high heart and strong arm.

While professionally my interest lies in the advertising of Jacksonville, less affected by the temporary setbacks than any other city or section of the state, sentimentally I have found great inspiration in Miami's example.

Following the hurricane representatives of national advertising media were apprehensive about what effect the storm would have on advertising plans. They recognized that advertising had been the important factor in making Miami and its neighbor cities nationally known and patronized as winter resorts, but they questioned whether it would be wise policy or not to immediately follow an appeal for funds with advertising programs.

Judging by what is being published, Miami and the other cities accepted advertising as an instrument of inestimable good in presenting the facts about reconstruction and winter recreations to the rest of the country, ignoring the absurd intimation that the appeal for funds was for general purposes, when it was based strictly upon the condition of a single needy class.

Outsiders will probably never know how much courage it took for Miami to launch such an advertising program on the heels of a disaster, which, sufficiently minimized, was bad enough. But experienced Miami does not regard advertising as a luxury; the Magic City recognizes it as a necessity, and other Florida cities are coming around to the same realization. Miami knows that seed time will be followed by the harvest!

AL HARRIS, Executive Director.

Tobacco Acreage Increase Indicated in South Georgia.

Construction of many new tobacco barns is reported in the bright-leaf-tobacco belt of south Georgia. This is accepted in some quarters as confirmation of reports that south Georgia will increase its tobacco acreage next year, because of the success of farmers with this year's tobacco crop and the probable curtailment in cotton in 1927.

An Old Town Takes on New Life.

By ROBERT W. BROCK, Farmville, Va.

Farmville, Va., in Prince Edward county, in what is known as Southside Virginia, is situated within 15 miles of the geographic center of the state. It is one of the old towns which has in the past few years taken on new life. Chartered in 1798, it is less than 25 years younger than the nation itself. However, its growth has been so slow that even today the entire population does not exceed 4000. But during the last half-dozen years the sleepy old town has shaken off its lethargy. A town manager form of government has been adopted and is proving highly satisfactory. No influx of outsiders has taken place; the new spirit springs from the native population.

Farmville's chief industry is tobacco, especially the dark, or export leaf, and between eight and ten million pounds are annually marketed here. But the handling of the tobacco is limited to stemming, prizing and redrying. Wheat and corn also thrive in this section of the state, and this year some farmers averaged as much as 40 bushels to the acre. One man, in fact, living within a few miles of Farmville, made an average of 47 bushels per acre on eight acres of land.

Farmville is the seat of the oldest and largest State Teachers' College for Women in Virginia, with nearly a thousand students, and there is situated within six and one-half miles of the town Hampden-Sidney College for men, which has just celebrated its one hundred and fiftieth anniversary—a small college, but one whose great influence is out of all proportion to its size. With an excellent high school and these two higher institutions of learning, unexcelled educational advantages are offered.

The most potent factor of the development of a civic and community spirit in the past three years or more was the establishment of a Lions Club. This club took over those things which a chamber of commerce would be expected to foster. The club is composed of the leading business and professional men of the town and is full of progress and aggressiveness. The first fruit of their activity was a new, modern, fireproof hotel, the Weyanoke, admirably located, facing the State Teachers' College, and suitable in every respect, both for the tourist and commercial trade. This hotel is purely a community enterprise and represents the investment altogether of local capital.

Next in order of importance comes the Community Hospital, also fostered by the Lions Club. The Commonwealth Fund of New York is putting up two-thirds of the money, the other one-third being raised locally. Work has already begun on this new hospital; the building and equipment is to cost \$200,000. It will meet every demand of the immediate section for many years to come; it is being built in accordance with the latest and most scientific plans, with thoroughly modern equipment.

The town owns its water and electric light plant, and not only furnishes its own citizens with electric current, but also the neighboring towns of Prospect, Pamplin and Hampden-Sidney, and at a very satisfactory profit. One of the wood-working plants of the town is operated by electricity supplied by the town plant.

It is doubtful if there is a town in the state, even twice or three times its size, with as many well-paved and well-lighted streets. Main street suggests far more the city than a country town in appearance. Three banks, with deposits between them of about \$3,000,000, under experienced and able management, furnish adequate banking facilities for the town and immediate section.

Farmville is located on the main line of the Norfolk and Western Railway, and is within 12 miles of Burkeville, where the Norfolk and Western forms a junction with the Southern.

It is situated on two trunk highways, the Norfolk-to-Bristol highway running east and west and the Washington-to-Raleigh highway running north and south. The latter is a part of the Atlantic Transcontinental Highway from Montreal, Canada, to Jacksonville, Fla.

A disastrous fire in one of the principal business blocks of Main street last March was met with more than fortitude by the citizens. They went to work at once and better and more imposing buildings are taking the place of those destroyed; most of these have been about completed, and at this writing practically the whole burnt area has been rebuilt. For a town of the size a large building program is going on. Contracts to the amount of \$500,000 are now being carried out.

The town is not without historical associations. Gen. Joseph E. Johnston, the Confederate leader, was born at "Longwood," about one-half mile from the corporate limits, and "Bizarre," an old home of the great John Randolph, is situated just across the Appomattox River, in Cumberland county. "Needham," where the famous law school was conducted by Chancellor Creed Taylor from 1821 to 1836, stands about one mile to the north. The Battle of Sailors' Creek, the last great battle of the Civil War before Appomattox, was fought some 12 miles to the northeast of the town, and Appomattox itself is only 35 miles to the west. Hampden-Sidney College, the oldest college in Virginia save William and Mary, and founded by the founders of the nation itself, among them Patrick Henry and James Madison in the first year of independence, has already been mentioned. One of the remarkable records of this college is that while it has passed through six wars and sent hundreds of its sons to the firing line, it has never during its entire history closed its doors.

\$260,000 Contracts on Louisiana Courthouse.

Lafayette, La.—Contracts approximating \$260,000 have been awarded by the Lafayette Parish Police Jury for the erection of a new courthouse and jail here. General contract was awarded to the General Contracting Company, San Antonio, Texas, at \$215,391; plumbing and heating, Escudier Bros., Lafayette, \$19,051, and jail work to the Fries Company of Covington, Ky., at \$24,955.

The building will be three stories and basement, of reinforced concrete, steel, stone and press brick, with reinforced concrete foundation, marble, tile and wood floors and composition and tile roof. William T. Nolan of New Orleans is the architect.

Florida City Offers \$461,000 of Bonds.

Fort Pierce, Fla.—Sealed proposals will be received until December 15 by the City Commission of Fort Pierce, Elwyn N. Moses, City Clerk, for the purchase of three bond issues aggregating \$461,000. The largest issue will be in the amount of \$371,000, to be used for local improvements, and will bear an interest rate of 6 per cent. An issue of \$42,000 for sewer improvements will also bear an interest rate of 6 per cent, while an issue of \$48,000 for a turbo-generator will bear a rate of 5 per cent.

Preserving Texas Figs at Galveston.

Galveston, Texas.—About 35,000 cases of figs, aggregating around 1,000,000 pounds, were preserved by the Galveston Fig Preserving Company during the season just closed, according to an announcement by John L. Sterling, president of the company. More than 40,000 pounds were preserved daily during the season, 125 people being employed. Plans are now being discussed for canning strawberries in the spring as well as vegetables and fruits.

Philosophy of Empire Building—Big Goal for a Big Stake.

By WALTER PARKER, New Orleans.

In a recent bulletin the United States Department of Labor says: "There is taking place in the United States today a new industrial revolution which may far exceed in economic importance that older industrial revolution ushered in by the series of mechanical inventions which occurred in England in the last quarter of the Eighteenth Century."

The bulletin shows that the output per man in the steel industry increased 50 per cent between 1914 and 1925; in the boot and shoe industry, 16.5 per cent since 1914; in the paper industry, 26 per cent since 1917. Larger dividends, better wages, greater national prosperity are the result.

Some day the water resources of the country will be used for beneficial purposes in place of being wasted in destructive floods, and then a wholly new and as yet undiscounted economic margin, over and above normal profits, will accrue to American agriculture, industry and commerce through irrigation, low-cost transportation, cheap power, checked soil erosion and protection from floods.

Meanwhile the average wealth per capita in the United States has increased from \$2800 in 1920 to \$4400 in 1925. The number of savings depositors has increased from 22,415,000, with \$15,000,000,000 in bank in 1920, to 44,000,000 depositors, with \$23,000,000,000 in bank in 1925.

Statisticians say the present-day wage scale is about 125 per cent above pre-war rates, while the present-day cost of living is about 75 per cent above pre-war prices.

These simple facts are of the greatest importance to the South.

During the period of Eastern, Northern and Western development the fundamental prosperity of the country was on a smaller scale.

The South is now the developing region. Its lands are in demand at values not dreamed of a generation ago. Strategic locations for Southern enterprises are snapped up. Southern resources now readily find purchasers.

There are surplus enterprise, surplus wealth and surplus people in the United States for the South to draw upon.

Best of all, the South itself now has money and is investing its surplus profits in standard increment-controlling securities in ever-increasing volume.

To Launch Ship for Southern Service.

Newport News, Va.—The new steamer Iroquois, under construction at the yards of the Newport News Shipbuilding and Dry Dock Company, for the Miami Steamship Company, a subsidiary of the Clyde Steamship Company, New York, will be launched on December 11. Miss Marion Shutts of Miami will be sponsor for the ship. The new boat is 407 feet long, with a 62-foot beam, and will probably go into service between New York and Miami in the spring.

\$500,000 in New Houses at Venice, Fla.

Venice, Fla.—Oren P. Ward of Tampa has purchased lots here at a cost of \$137,000 and will erect residences costing from \$20,000 to \$40,000 each. The lots will have a frontage of approximately 180 feet. When the houses are complete the total expenditure will approach \$500,000.

\$600,000 Bond Election at Monroe, La.

Monroe, La.—An election will be held here January 18, 1927, on the issuance of \$600,000 water-works improvement bonds. A special registration will be held December 18 for property owners eligible to vote at that time.

The Forests and the South.

INTERVIEWS WITH UNCLE SAM.

By CARL WERNICKE.

Number II.

It is well guarded—the way to that secret office of Uncle Sam, who is the clear-thinking head of the greatest business on earth, the United States. No wonder he is believed to be a mere myth! But when you stop to think of it, even a business as big as the United States must have a permanent head, must it not?

Having had one interview with Uncle Sam on forestry, it was much easier to get another, and I did.

"Sit down," he ordered, when I entered. "I am going to talk to you about the South. My time is limited today, so get your pencil ready."

First (he went on to say without waiting to see if I was ready), it is important to get the South into perspective.

You understood in your last talk with me, I think, that before long this country is going to need lumber badly, because when we use up our warehouse full, which nature handed us in the beginning, we must grow lumber as we grow wheat or cotton. It seems probable that we can never grow enough to fill all our needs. If you have that clearly in mind, we can forget it for a moment.

The big problem bothering the South is land, idle land. At present the South has probably over 150,000,000 acres of idle land, and before very long will have over 200,000,000 acres if something isn't done about it. You can't imagine how much land that is. A strip of land a mile wide would have to be over 300,000 miles long to hold 200,000,000 acres. In other words, it would go around the world about thirteen times.

What "idle land" means is more important to understand than how often it goes around the world. Folks say, "Oh well, we have so much land anyway, what difference does it make if some of it is idle?"

The trouble is that the way civilization is put together the most expensive kind of land is idle land. The owner of the land loses money while it is idle, because he loses interest on the money tied up in land that isn't producing anything. When the land is taxed, he feels his loss all the more. But the owner loses less than the public in general!

Take the county government. Idle land pays low taxes. If the tax is made too high, it can't be collected and the land comes back on the county's hands. When a county can't collect taxes enough the roads suffer, the schools are poor and all the county activities are hampered.

Take the grocer or the clothing merchant or the doctor. If they attempted to make a living where there was nothing but idle land they would soon starve to death. Every idle acre ought to make every doctor, lawyer, merchant or banker groan because it costs them business. The real estate man who can look at an idle acre of land without a cry of anguish should get out of business. He hasn't the stuff for his calling.

When you think it over you can see why the thoughtful people of the South are tremendously concerned about so much idle land. If you go into almost any group of folks in any town in the South and mention the land problem, it won't be more than two minutes before some one will announce, "Yes, sir, what we need is more farmers down here." That is the signal usually for a chorus of reasons why the idle land in that particular neighborhood would be snapped up in a minute if people from somewhere else only knew how many strawberries or pecans or oranges or what-not each of those acres will produce.

Now, in my position as the head of this business we call the United States, I am well aware of the fact that prices for Southern lands are low enough to attract farmers, and that the climate is as tempting as a land agent's circular can say it. That has been true for many years. It is also true that Southern agriculture has increased in volume and in skill in a healthy way. Yet I want you to understand that agriculture is not the solution to this idle-land problem, and I'll tell you why.

In the whole United States we have only about 400,000,000 acres of land devoted to crops. Nearly every schoolboy is beginning to know that this 400,000,000 acres produces generally a little more than we can use. Every schoolboy also knows that scientific farming methods can make this same amount of land produce a great deal more than it does, but as it already produces a little too much, why make it produce more just now?

The little too much, or the little too little, of any production is what makes prices low or high.

If you have 10 boys and only 9 swimming suits, it is clear that one boy is going to be without, and there will be a scramble for the suits. If you have 11 suits, that extra one suit makes all of the suits cheap. The same thing is true of wheat, diamonds, pigs and money.

Our 400,000,000 acres of crop lands already produce a little too much. Suppose we set out at this time to add to this crop land area another 50,000,000 acres. Every farmer in the country would be made poorer and we would not have helped the Southern land problem. Just now every extra farm makes 10 farmers poorer. Solving the Southern land problem by peopling the country with poor farmers isn't going to help.

That brings up another point. Just because agricultural development will not solve the land problem is not an argument against the desirability of agricultural development. It just points out the need to get the horse and the cart in the right places!

Under modern conditions the farmer must have markets if he is going to prosper and be able to buy what merchants and manufacturers have to sell. If every family raised its own food, farmers would have no markets. To be prosperous the farmer needs plenty of families in the towns and cities who buy their food instead of raising it themselves. In order to be able to buy food the city family must have a way to earn money. In other words, in order to have prosperous Southern farmers there must be plenty of Southern industries with payrolls.

But industries must have raw-material resources. With the exception of one or two relatively small areas, the South has no natural resources of raw materials on which to found great and enduring industries, big enough to meet her farm problem, unless—get this now!—unless her lands will produce these industrial materials.

The wood-using industries are tremendous. Just as a pleasant and profitable way to use 10 minutes, look about you and see just how much wood is used, in how many different ways. Wood is so familiarly and so widely used that we are apt to take it as a matter of course. We seldom stop to realize how much all industries depend on wood, and how many industries use wood as their chief raw material. The fact is that our abundance of cheap wood has made us

the richest nation on earth. We shall soon lose that advantage unless we change our ways.

Now, we can bring these strings together and see a marvelous thing—

The nation needs lumber, and more of it, than we can raise.

The South's land problem is staring the whole nation in the face.

The South's industrial problem requires a permanent source of raw materials.

Can you not see that the key to all three of these problems is to grow forests in the South?

Pine trees are one crop which will never find too many acres planted. Not every idle acre in the South will go into pine-tree ranches, but if they did we still would have too little lumber to go around.

When the South puts pine-tree crops on its idle land it is a benefit to farmers everywhere in the nation. The farmers of the South ought to give three cheers every time they see an acre of young pine trees growing where otherwise some misguided innocent might be raising other crops at a loss.

Incidentally, I want to tell you this: Any farmer in the South who has land on which turpentine-pine trees will grow wants to have as many acres of pines growing as he can afford. It will prove the best crop for the least work he can raise, and it is a mighty fine insurance for his old age.

It is the merchant and the doctor, the lawyer, the banker and the real estate man who should be most interested in pine-tree growing. They never prosper unless their customers and clients prosper. With enough pine trees growing around their town, they are certain of their own prosperity.

If the citizens of the South knew what they ought to know about their own problems and their forests, they would make every politician running for office carry a plank in his platform declaring, "I am for more pine trees on our lands."

I interrupted Uncle Sam. "How about cotton?" I asked. "Cotton! For what?"

"To make idle lands productive. If the South could increase its cotton acreage and get more cotton mills—"

"Stop right there!" said Uncle Sam. "You may not like to hear what I have to say on that subject, but it is the worst mistake in the world to shut your eyes to truth just because you happen not to like it.

"To increase the production of cotton per acre is going to be necessary. It will have to be more pounds per dollar of cost, and not just more bales per acre. This is because the rest of the world is going to raise more and more cotton. It means that only those who can raise cotton cheaply enough will make money at it.

"No one pretends that the workers in our cotton fields make a lot of money. The cotton labor is low-wage labor, and low-wage labor is not a good market. But in spite of this low return to our people our biggest cotton buyer is England, and England says our cotton costs too much!

"You understand that about a sixth of England's population depends on cotton industries. If our cotton costs too much, those folks are poor. Therefore, it is a necessity for England to get cheaper cotton. She is doing it. She is developing cotton plantations in India, in the Sudan, South Africa and Australia. Our cotton must compete with the cotton those lands produce. And soon or late our cotton goods will compete with more and more difficulty with English cotton goods. That will make stiff going for both our cotton farmers and our cotton mills.

"If we hold our own, we'll be doing well. It is not at all probable that we can increase our cotton production very much. What increase we can make can easily be handled by increasing the production on the land already in use for cotton.

"But suppose we could increase the land used for cotton

growing. We produce about one-third of a bale per acre on 45,000,000 acres now. If we could increase our use of cotton by a half, and did not increase the yield per acre, it would add a total of 22,000,000 acres, or only about 10 per cent of the idle land.

"It is useless to think that agriculture of any kind will solve the problem. Agricultural development cannot go ahead faster than industrial development. Industrial development cannot take place without power, transportation, skilled labor, skilled management and raw materials. Of these the most important—what we must work hardest to be sure to provide—is raw materials. That is the most vital to the South. In pine forests lies the one sure, permanent and greatest foundation for Southern prosperity."

Uncle Sam turned to look out of the window. "There is a real reason," he said softly, "why all men love trees. If you know the truth, you know that we cannot live without them."

New Parking Device for Automobiles.

Drivers in congested city traffic have all met difficulties at times in parking their cars at the curb in the regulation manner of backing and filling on the trial and error principle. There is now offered an invention which promises to make parking in restricted areas an easier task.

Arrangements are reported to have been made for the early manufacture of an automobile incorporating the new parking device, which has been invented and patented by Villor P. Williams of Baltimore. The attachment has been placed on an automobile in active operation in city traffic. It enables the driver, without leaving his seat, to lift his car mechanically until the four wheels are three inches off the ground and then to run the car sidewise into a parking space only one or two inches longer than the car itself. The mechanism is connected with the transmission and is operated by the engine of the car through a worm gear to the small wheels which normally are concealed under the chassis, but which are raised or lowered by the driver shifting a special lever.

The time required for parking with this attachment is said to be about 19 seconds from the moment the vehicle is halted before the completion of the lifting process and the sidewise movement to the curb. The mechanism is sufficiently strong to lift a car of any weight and move it sidewise in either direction for almost any reasonable distance. With this device the car may be raised for tire repair work or for putting on chains.

Building-Stone Deposits in Chatham County, North Carolina.

Prospects of the development of stone quarries in Chatham county, North Carolina, yielding materials suitable in quality for all kinds of crushed stone and general building purposes develop from a survey of territory along the Bonlee and Western Railroad between Bennett and Bonlee by Dr. J. L. Stuckey, state geologist.

The examination was made with the view of determining the value and quality of both stone and clay deposits. However, the report of the geologist to the Department of Conservation and Development reveals that no clay of promise was found.

\$1,000,000 Sale of Jackson (Miss.) Bonds Soon.

Jackson, Miss.—Sale of the \$1,000,000 of bonds recently authorized by the voters of this city for civic improvements will take place in January, according to Walter A. Scott, Mayor. Two new fire stations of the bungalow type are to be built; the city jail is to be demolished; a park and playground will be established, and a new jail erected.

To Develop East Coast of Florida.

[Special Correspondence Manufacturers Record.]

Hollywood, Fla., December 4.

The adoption of plans of great constructive import for Florida followed a review of recent development of the state at the convention held here by the Associated Chambers of Commerce of the East Coast of Florida. With David Sholtz, president of the Daytona Beach Chamber of Commerce, presiding, approximately 150 delegates were present, representing the area from Jacksonville to Key West.

As shown in the report of Mr. Sholtz, the associated chambers in the three years of their composite organization have achieved the double-tracking of the Florida East Coast Line from Jacksonville to Miami, have made great progress in the rebuilding of the Dixie Highway from the Georgia line to Miami and expect favorable action by Federal engineers on the proposed acquisition of the East Coast Canal by the Federal Government. Among the president's suggestions for the new year were plans for block advertising for the entire east coast, the employment of a freight rate counsellor and the employment of counsel to handle the relations of the entire east coast with the owners of the present Florida Coast Line Canal and Transportation Company.

In a report on roads, Dr. Fons A. Hathaway, chairman of the State Road Department, said that Florida was building more roads and as good roads as any state south of the Ohio River. The Dixie Highway is now a complete paved road from the St. Mary's River at Folkston, Ga., to Miami, without a single detour. The state has completed 16.41 miles of concrete road at cost of \$645,304.43; 17.76 miles of bituminous macadam at cost of \$642,259.03; 92.39 miles of surface-treated rock base at cost of \$2,895,304.20; 14.88 miles of grading at cost of \$166,424.25, and has under construction 11.36 miles of sheet asphalt at contract cost of \$690,797, and 119.20 miles grading and drainage structures at a contract cost of \$1,583,913.57; also 727 feet of concrete bridges at contract cost of \$258,987. The state has only three gaps not completed or under construction, a total mileage of 53.33 miles, the estimated cost to complete being \$1,877,818. The 119.2 miles now being graded will be paved, when grading is finished, at an estimated cost of \$2,929,339.

To summarize: The State Road Department has completed at this date 141.44 miles of road and 2246 feet of bridges at cost of \$4,573,103.83; under construction are 130.56 miles of road and 727 feet of bridges at contract cost of \$2,633,897.87; plans to complete 172.53 miles of road at an estimated cost of \$4,807,257, making the total cost of a complete East Coast Dixie Highway from the Georgia line to Miami of \$12,014,058.70, and if no undue delays are experienced in obtaining rights of way from the counties this complete project will be a reality in less than two years.

Harold Colee, director of public relations of the Florida East Coast Railway, reported that the double track was completed from Jacksonville to Miami, making a complete double-track system from New York to Miami of 1368 miles; the completion of the three-color light automatic signal system; the completion of the Bowden yards, Miller repair shops and three office buildings at St. Augustine; the St. Augustine to Bunnell double-track cut-off, saving about 20 miles from the old route through Hastings; the Hialeah cutoff and yards at Miami, all at a total cost of about \$61,000,000, of which only about one-third is represented in double-tracking cost. The Florida East Coast Limited will this year have a schedule

time of 36 hours from New York to Miami, being an average speed of 28 miles per hour for the 1368 miles, described as being the fastest long trip of any train in America.

As president of the Florida State Hotel Association, E. R. Mace gave an address on the accomplishments of that association to remedy any possible unfair practices of hotels in Florida. The association has agreed to publish minimum, medium and maximum rates and maintain them throughout the season. The hotel association has about 700 members who have entered into this agreement. Mr. Mace reported that there had been expended on hotel construction in the state during the past year \$112,000,000.

The tourist outlook for this season was discussed by Secretary Albion E. Gillett of Lake Worth, who read letters from State Secretary of Agriculture Nathan Mayo; State Comptroller Ernest A. Amos; A. H. Gass, State Chamber of Commerce, Jacksonville; Col. Peter O. Knight, Tampa; Herman Dann, president, State Chamber of Commerce, St. Petersburg; Alfred A. Wagg, president, West Palm Beach Chamber of Commerce; Mr. Jackson, director, United States Chamber of Commerce; Carl Lehman, executive vice-president, Orlando Chamber of Commerce; A. A. Coult, secretary, Fort Myers Chamber of Commerce, and L. P. Dickie, executive vice-president, Tampa Board of Trade. To summarize their letters, it would seem that these men expect an even better volume of tourist travel than last year or the year before last, and a class of winter visitors who will come and enjoy what Florida has to offer without embarrassment from the speculator and high-pressure real estate salesman; that they will experience fair treatments from the hotels, and will all come again.

John Wood, secretary of the Stuart Chamber of Commerce, spoke of the necessity for controlling the mosquito, and the association voted to appoint a committee to study this vital question.

The East Coast Canal project was discussed by Charles F. Burgman of Daytona Beach on his allegation that the Florida Coast Line Canal and Transportation Company had never lived up to its charter obligations with the trustees of the Internal Improvement Board of Florida and, therefore, its charter should be cancelled. Mark Wilcox, attorney for Harry S. Kelsey, explained the position of the present owners, concluding that his clients would do anything within their power to co-operate with the people of the east coast in doing with the canal property what the people of the east coast want done. Judge John O. Shares of Eau Gallie said that the east coast must acquire the right of way and persuade the United States Government to develop a satisfactory free waterway.

Col. Earl Wheeler of Daytona Beach, who in association with J. M. Braxton of Jacksonville in 1924 and 1925 made an economic report on the need of the Government taking over and rebuilding this canal, stated that in his opinion the waterway could only be valuable as a transportation artery under Government ownership and operation to a depth of 8 feet and 100 feet wide; that the project was now being considered by the Board of Engineers for Rivers and Harbors at Washington; that the Association of Chambers of Commerce of the East Coast of Florida already had pledged themselves to acquire and give to the Federal Government the right of way for the improved canal, and that until the board of engineers approved the project there was nothing to be gained by litigation with the present owners of the canal company.

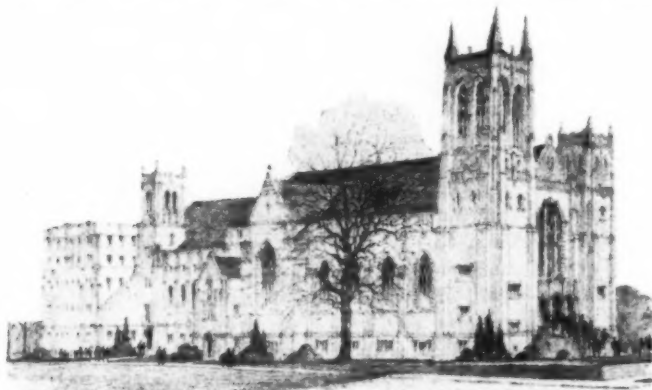
The matter was disposed of by the convention passing a resolution appointing a committee, to consist of Mr. Burgman, chairman; Judge Shares and Colonel Wheeler, to co-operate and negotiate with the present owners of the canal property,

to be turned over to the Government in accordance with the Association's already expressed pledge.

The election of officers resulted as follows: President, David Sholtz, Daytona Beach; vice-president, C. C. Freeman, Hollywood; vice-president, Eugene Masters, St. Augustine; secretary and treasurer, B. R. Kessler, Fort Pierce. The next quarterly meeting will be held in January at Flagler Beach.

Building New Church at Charlotte.

Work is progressing on the new building being erected in Charlotte, N. C., for the First Methodist Church South, a consolidation of the Tryon Street and Trinity churches. Foundation for the building has been completed, while the steel construction is under way and the walls rising. The building will be about 330 by 100 feet, with limestone walls,



UNDER CONSTRUCTION FOR FIRST METHODIST CHURCH SOUTH, CHARLOTTE.

slate roof, concrete and wood floors and equipped with vapor-heating plant. The cost of the building, completed and furnished, will be about \$560,000, the site having cost an additional \$150,000. J. H. Little is chairman of the building committee and Spencer & Phillips of Memphis, Tenn., are the architects.

Contracts have been awarded as follows: General, J. P. Little & Son; heating, Charles W. Christian; plumbing, J. A. Haley & Son, and electrical work, Hunter Electric Company, all of Charlotte.

\$1,000,000 to Eliminate All Grade Crossings in Greensboro, N. C.

Greensboro, N. C.—Plans are being prepared for the elimination of 11 railway grade crossings on the Southern Railway in this city at a cost of \$1,000,000. Underpasses are to replace every grade crossing. The general type of construction adopted is a steel girder deck with concrete abutments. Plans should be ready for bids about January 1 and contracts let about February 1. The city will enter into contract with the Southern Railway, under which the city will do the actual work and will finance the program, the railway and the city each to pay 50 per cent of the cost. The railway will make its annual payments to conform to the payments the city will have to make on the bonds. The bonds come due serially in specified amounts each year. The railway will also pay interest to the city on all deferred payments.

Fellheimer & Wagner, New York city, are the engineers.

\$250,000 Amarillo School Bonds Sold.

Amarillo, Texas.—The Amarillo Independent School District has sold \$250,000 bonds to J. E. Jarratt Company, Dallas; C. W. McNair & Co., Chicago, and the Republic Trust and Savings Bank, Dallas, for premium of \$6350.

American Mining Congress Meets at Washington.

Delegates from metal-mining sections of the West and coal-mining districts of the South and East were in attendance this week at the opening of the twenty-ninth annual convention of the American Mining Congress at the Mayflower Hotel, Washington. H. W. Seaman of Chicago, chairman of the board of directors of the Inland Waterways Corporation and a member of the board of the American Mining Congress, presided. Hugh Shirkie of Terre Haute, Ind., president of the American Mining Congress, reviewed the work of the organization during the past year. Statements on conditions in the various divisions of the industry were made by E. W. Parker, director of the Anthracite Bureau of Information of Philadelphia, on anthracite; Walter Barnum of New York, president of the National Coal Association, on bituminous; J. W. Ady, Jr., mining engineer of Colorado Springs, on gold; Frank M. Smith, director of smelter operations of the Bunker Hill and Sullivan Mining and Concentrating Company, on lead; W. Mont Ferry of Salt Lake, president of the American Silver Producer Association, on silver; J. D. Conover, secretary of the Tri-State Zinc and Lead Ore Producers' Association, on zinc, and H. T. Edgar of Edgar Brothers Company, Metuchen, N. J., on non-metallics.

The relation of politics to natural resources was also considered, with George B. Harrington of Chicago, president of the Chicago, Wilmington and Franklin Coal Company, presiding. "The Coal Argument Against Governmental Interference" was presented by Harry L. Gandy, secretary of the National Coal Association of Washington, D. C. "Further Disposition and Control of Our Public Lands" was the subject of an address by F. W. Mondell, former Congressman from Wyoming. "A Sensible Application of Our Anti-Trust Laws" was given by Nathan B. Williams of the National Manufacturers' Association.

Other speakers scheduled and the subjects discussed were: Secretary of Labor, J. J. Davis, "A Unified Labor Program for the Bituminous Industry"; J. G. Bradley, Dundon, W. Va., president of the Elk River Coal Company, "The Coal Labor Situation"; Cleveland Dodge, Phelps-Dodge Corporation, "Labor Relations in Metal Mining"; Dr. A. F. Greaves-Walker, dean of the State College of Engineering of North Carolina, "Development of Non-Metallic Industries of the South"; Harry N. Taylor, "Marketing May Revolutionize Coal Production"; Stephen S. Tuthill, secretary of the American Zinc Institute, "The Zinc Industry"; Robert E. Tally, United Verde Copper Company, "A Stabilized Mineral Industry"; William A. Willis, manager of the Copper and Brass Research Association, "Promoting an Expanding Future for Copper"; Dr. Henry Mace Payne, consulting engineer to the American Mining Congress, "Mineral Development in the South," and others whose subjects covered the question of mine taxation and the trend toward mechanization of mines, standardization and the status of mining projects before the American Engineering Standards Committee.

Fortieth Anniversary of Roanoke Times.

Roanoke, Va.—Celebrating its fortieth anniversary, the Roanoke Times on November 30 issued an anniversary number in commemoration. Reminiscences of happenings and events transpiring within the period of the paper's existence are presented and greetings from former editors are a feature of the edition.

Citizens of McKenzie, W. Va., will vote December 14 on a bond issue of \$200,000 for building streets and \$25,000 for the erection of a city hall.

NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore, we often publish letters with which we do not agree.—Editor Manufacturers Record.]

The Farmer's Troubles, As Seen by a West Virginian.

J. M. RADEB, Lewisburg, W. Va.

I think the condition of the farming industry was caused primarily by that unholy, disastrous and unjustifiable war, followed by the drastic deflation policy of the Federal Reserve Board, whose weakness lies in the frailty of human nature, and by high taxes, high tariff, restricted immigration and the extravagance of many. The remedy, in my opinion, lies in a reversal of these causes and in a return to the old-time habits of industry and frugality.

I want to thank you for the information I have received from the MANUFACTURERS RECORD, which has gone far toward shaping my opinions on the various subjects which concern our people, and to commend you for the courageous stand you have taken on all the vital questions of the day.

Let America Guard Its Priceless Heritage and Maintain High Wages.

ROGERS C. WALCOTT, New York City.

Among the many topics of general interest I have noticed under discussion recently in your magazine, none seems to me to be of such big proportions, and yet until recently so neglected, as the explanation of why "America is a labor paradise" or why "real" wages differ so greatly among nations equally advanced in the general arts of civilization. Surely Courtenay De Kalb is right in describing economic balance as a juggernaut which levels everything. Will its inexorable laws permit us to continue a scale of wages higher than in any other country of the world? It seems to me as though a combination of circumstances favors it, providing intelligence is allowed to rule. Economically, as he remarks, the frontier is still with us—and intelligence dictates that we keep it by continuing to restrict immigration.

If we will do so, a powerful law aligns itself on the side of continued high wages; I refer to the fact that birth rates tend to fall as prosperity increases. As this applies just as surely to the new immigration as to the "old stock," our own moderate natural increase will probably never crowd the country to the point of narrowing opportunities for our descendants. Thus we may avoid forever the burden of a "proletarian precipitate," which Mr. De Kalb so aptly terms the result of overpopulation.

Contrast our situation with that of a country already overcrowded, into which mechanical inventions are introduced. Immediately the prospect is for expanding production and increasing wealth. But what actually happens? The proletariat, already in existence, is unable to grasp or utilize the opportunity and responds by increasing numerically by leaps and bounds, so that in a short time the same land is supporting twice as many people but at no higher level of wages whatever. This has been strikingly true of the rich Nile Valley in Egypt, where introduction of modern science and irrigation has increased the production of cotton and other commodities manyfold; but in the meantime the population has increased from slightly less than 2,500,000 one hundred years ago to 6,800,000 forty years ago, since when it has about doubled. The result is a negligible change in the per capita wealth. The same holds true of Italy, India and many other countries; so generally, indeed, that cynics have said that science and invention have not lightened the human burden

one whit, but have only enabled more people than before to live on the same scale.

Trotsky recently made the statement that in ancient days the Greeks were freemen because each one had four or five slaves, but that today the Americans are free because everyone has 40 to 50 mechanical slaves working for him. An able statement of what can be accomplished by capitalism! Which hated system, I take it, means the individual ownership of the means of production, dependent for its development on individual savings, which can only be properly encouraged by the promise of their future productiveness. It is a system inconsistent with the existence of a proletariat, because the latter could not, of its very nature, utilize it or appreciate it.

In view of the above, let us, as Mr. De Kalb says, guard our heritage of an ample reserve of natural resources carefully to the extent that the old frontier will never quite disappear. Then under a sane government inventions yet to come can be intelligently applied; machinery will be slave to man, not vice versa, and our natural heirs will develop a scale of wages as yet unapproached.

Offers Five-Acre Site for Factory.

C. M. HAMMOND, W. H. Hammond & Sons, Proprietor, Cedelmoak Dairy Farm, R. F. D. No. 4, Augusta, Ga.

Our farm of 285 acres is situated three miles east of Augusta, Ga., in Horse Creek Valley, Aiken county, South Carolina, and traversed for about a mile by the Southern Railroad. On either side of this road the land is level and cleared, making an ideal factory site. We would welcome a factory and are willing to give a site of five acres to any bona-fide person, firm or corporation that would like to locate here.

We are close to many raw materials, such as cotton and cottonseed oil, clay, chalk and kaolin, lumber and wood pulp, with unlimited and cheap hydro-electric power, and a surplus of good white and colored labor. We feel sure our proposition is worth investigating.

Taxation Should Not Be Controlled by Socialistic Legislators.

GEORGE M. CRAIG, Port Arthur, Texas.

I have read William H. Lindsey's letter on the subject of the difficulty in securing money from the large banking interests for building new industries. In my opinion, Mr. Lindsey does not go far enough in placing the blame for lack of capital for new industries. If it were not for the 20 per cent surtax and 5 per cent normal tax assessed against earnings of individuals with large incomes, thus making investments in tax-exempt securities more profitable, capital could be found from individuals, as was done before the high surtaxes were imposed. Another obstacle in securing money for new enterprises is the 13½ per cent tax on the earnings of corporations.

If I were a rich man, I would do as many of them are doing. I would place my money in tax-exempt securities and take life easy. Why should those rich men place themselves at the mercy of a bunch of politicians, who are now taking 25 per cent in one case and 13½ per cent in another from each dollar made? Taxes should be equal and uniform, as provided by the Constitution, and not subject to the whims of socialistic politicians.

THE IRON AND STEEL SITUATION

New Orders for Steel.

Pittsburgh, December 6—[Special.]—The steel market has been more active in the past week than was expected. Various orders have been placed by jobbers and manufacturing consumers whose previous purchases were supposed to round out their requirements for the year. Ever since the enthusiastic buying of the "Coolidge boom" two years ago buyers have been pursuing a hand-to-mouth policy, and with increasing rigidity. It appears now that some buyers restricted too much.

Steel production in October represented an 87 per cent operation of the steel industry as a whole. The November ingot report will probably show between 80 and 87 per cent. Mill operations, on the whole, have decreased only slightly, and while there will presumably be some further seasonal decrease this month, the month will probably show an average operating rate of 75 per cent or more. The precedents of five consecutive years will be violated if January does not bring heavier production than December.

In the automobile trade steel buying has rounded the seasonal turn. December production of cars and trucks is normally the lightest of the year. As shipping orders need to be placed an average of about a month before the actual production, the turn is now due and has been illustrated by some fresh buying of importance in the past 10 days, together with many releases on old orders for shipment of pig-iron, cold-finished bars, sheets and cold-rolled strips. Official statistics of automobile and truck production will probably show production in the last three months of the year about 15 per cent less than would have occurred with the usual seasonal swing.

Fabricated structural-steel lettings reported last week totaled scarcely 19,000 tons, making another light week, but new inquiries coming out were unusually heavy, totaling about 50,000 tons. The volume of lettings in the past three months has been between two-thirds and three-fourths as large as the average in the first eight months of the year. Small lettings have persisted, while big jobs have been less frequent. Railroad construction will in all probability be at least as heavy next year as this. Railroad buying in the past year has been heavier in all lines but freight cars. A recent summary shows that nearly all cars now are of steel construction, and assumes an average life of 30 years. The railroads do much more car repairing than formerly, and repairing steel cars involves quite a large tonnage of steel.

Steel-rail production has increased lately. Heavy deliveries are required by the Southern roads, while the rail mills have much business for 1927 delivery, from which they can draw winter rollings to offset more or less seasonal decreases in demand in other lines.

The National Tube Company, through its subsidiary, the National Supply Company, has booked an order for 50,000 to 60,000 tons of line pipe for a 10-inch oil run to run about 500 miles from the Texas Panhandle to the Gulf Coast, the line to be controlled jointly by the Humble Oil Company, a subsidiary of the Standard of New Jersey; the Magnolia Petroleum Company, a subsidiary of the Standard of New York, and the Gulf Refining Company. Some additional line pipe will be needed for feeders. Pipe mills have now caught up in deliveries of oil-country goods, on which they were four to eight weeks behind in the summer, and will replenish stocks in the next couple of months.

Steel prices are holding very well and better than might have been expected from some little irregularities that cropped out a few weeks ago. The two cents minimum on merchant bars is fully preserved in the general market. Shading developed in October by a new producer in the Cleve-

land district, and the refusal of other mills to be disturbed by the incident brings out the firmness of their position. In sheets there is a little more shading, but this is of advanced prices announced in September and never established by any large volume of sales as the general market. Wire products are very rigid in nearly all sections.

Pig-iron remains very dull. Some foundries are not operating well and there is suspicion of pig-iron prices since recent advances were predicated on the coal and coke price boom, which has since collapsed.

Lull in Buying Only Temporary.

Birmingham, Ala., December 6—[Special.]—Furnace interests of Alabama are confident the present lull in buying is but for the moment and that before another week passes there will be encouraging activity. Survey shows that the lagging in several directions is of greater intensity this week, the cast-iron pressure-pipe trade now participating in the dullness. The stove foundries, which require more or less tonnage frequently, buying in lots not more than 300 to 750 tons at a time, have had a little activity of late and there have been a few other industries maintaining steady production. On the whole, the buying is quieter than at any previous time this year. The quotation base remains firm, \$20 per ton, No. 2 foundry. But little iron has been sold for delivery during the first quarter of the year.

Bookings warrant the steady operation of blast furnaces at the present pace for the remainder of the year. There is little surplus foundry iron on yards in this district. Deliveries up to a few days ago were in excess of the make. Orders, too, for several weeks, though in small tonnages, aggregated more than delivery. These conditions hold up confidence.

Activity in the steel market continues. The Gulf States Steel Company has five of its six open-hearth furnaces in operation at its mill at Alabama City. The Tennessee Coal, Iron and Railroad Company has all its open-hearth furnaces in operation, with the exception of two or three under repairs. The finishing mills of both companies are doing well and there is steady shipment. New business is reported from various directions. A large amount of rail is already sold for 1927 delivery, together with railroad accessories. Other shapes are selling, including reinforcing bars. Structural steel, sheet and plate are in good demand. Fabricating shops are confident of better business in the near future.

Inventory time is approaching, and this may have something to do with the situation so far as the pig-iron and some of the steel industry is concerned.

During the past week N. F. S. Russell, president; D. P. Hopkins, vice-president, and T. P. Anthony, director of the United States Cast Iron Pipe and Foundry Company, Burlington, N. J., inspected plants of the corporation in Birmingham and immediate district. The company has shops in Birmingham, Bessemer and Anniston, also at Chattanooga, Tenn. While the trade is not so active right now, a splendid year is being rounded out; statistics as to make will show up well in comparison with former years. The pipe quotations have been weak, but no change is noted recently, the base being \$39 to \$40 on 6-inch and over sizes. Good business has been enjoyed on centrifugal pipe for some time.

Another set of visitors to the district the past week was headed by W. H. Coverdale, New York, director and principal stockholder in the Gulf States Steel Company. Accompanying him were D. B. Clark, banker; Howard Bayne, capitalist; John A. Garde, capitalist; E. T. Weil, steel manu-

facturer, and Leo W. Burpee, industrial engineer, all of New York; Paul M. Davis, vice-president of the American National Bank and director in the Tennessee Central Railroad, and his brother, N. Davis, capitalist, of Nashville, Tenn. Mr. Coverdale and party inspected all the properties of the Gulf States Steel Company, including the ore mines at Shannon, coal mines in Tuscaloosa and Jefferson counties, and the steel mill, finishing mill and bar mill at Alabama City, in Etowah county. General feeling is that the Gulf States will map out a program of development so as to diversify its production. The strong foreign competition on products now manufactured warrants consideration of other plans and expectations are that announcements will be forthcoming shortly. Leslie E. Geohegan is vice-president and in charge of operations, no successor to Charles A. Moffett, president, being announced as yet. James Bowron is chairman of the executive board.

Coal mining is at the peak, every ton possible being produced. Only car supply regulates the production and but little interruption of operation so far has been noted. The output in the state continues around 420,000 tons weekly. Export business is still being handled and much coal is taken by railroads who ordinarily buy the bulk of their fuel from other districts. Wholesale prices have been up for the past four or six weeks.

Coke contracts for delivery during the first half of the coming year are being made, with quotations very firm at \$5.50 per ton, foundry coke, average, and \$6 for the few lots on spot delivery. The independent coke producers feel confident there will be a steady market for the product indefinitely.

The old-material dealers are moving heavy melting steel and other products steadily. In some instances there is night work being done on yards of dealers preparing the stock according to sizes required here. Indications point to an active market for several weeks. Quotations continue low and weak, but no change is anticipated.

Pig-iron and iron and steel scrap quotations follow:

PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$20.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$20.50; iron of 2.75 to 3.25 per cent silicon, \$21.00; iron of 3.25 to 3.75 per cent silicon, \$21.50; iron of 3.75 to 4.25 per cent silicon, \$22.00; charcoal iron, f. o. b. furnaces, \$29.00 to \$30.00.

OLD MATERIAL.

Old steel axles	\$16.00 to \$17.00
Old iron axles	16.00 to 17.00
Old steel rails	12.50 to 13.50
Heavy melting steel.....	13.00 to 13.50
No. 1 cast.....	16.00 to 17.00
Stove plate	14.00 to 15.00
No. 1 railroad wrought.....	11.00 to 12.00
Old car wheels	15.00 to 16.00
Old tramcar wheels	16.00 to 17.00
Machine shop turnings.....	8.00 to 8.50
Cast-iron borings	8.00 to 8.50
Cast-iron borings (chem.).....	15.50 to 16.50

Immense Coal Traffic.

Bituminous coal shipments for the week ended November 20 were the greatest for any week ever reported, according to the Car Service Division of the American Railway Association. The total was 251,842 cars, or 14,253,000 tons, which broke all production records. This exceeded by 8754 cars the previous record loading made during the week of November 13. From January 1 to November 20 this year production of bituminous coal totaled 502,062,000 tons, an increase of 47,876,000 tons over the same period last year. This year production of anthracite coal has totaled 75,139,000 tons. For the week ended on November 20 it amounted to 34,545 cars, or 1,760,000 tons.

A \$250,000 building is planned at Enid, Okla., to house the Young Men's Christian Association and the Young Women's Christian Association.

RAILROADS

BIG EQUIPMENT CONTRACTS PENDING.

Missouri Pacific, Baltimore and Ohio, Santa Fe, Etc., Have \$35,000,000 in Sight.

President L. W. Baldwin of the Missouri Pacific Lines has announced that the company is asking for bids to supply about \$13,000,000 of new cars and engines to be delivered as early as possible in 1927. This will include 46 large type locomotives, of which 15 will be eight-wheel switching locomotives, 5 heavy Mikado-type freight locomotives and 5 Mountain-type passenger locomotives for the Missouri Pacific Railroad; 5 Mikado-type freight locomotives and 5 heavy eight-wheel switching locomotives for the International-Great Northern Railroad, and 5 Pacific-type passenger locomotives and 6 eight-wheel switching locomotives for the New Orleans, Texas and Mexico Railway, both of which latter are subsidiaries in the Missouri Pacific system. Of 70 all-steel passenger cars the Missouri Pacific Railroad will receive 5 dining cars, 3 cafe club cars, 10 passenger coaches, 10 baggage cars, 10 combination passenger and baggage cars and 6 combination mail and baggage cars. The International-Great Northern Railroad will receive 4 chair cars, 6 passenger coaches, 2 baggage cars and 2 dining cars, and the New Orleans, Texas and Mexico Railway will receive 6 chair cars, 4 baggage cars and 2 combination mail and baggage cars.

The freight-train equipment, consisting of 3220 cars, will be distributed thus: Missouri Pacific Railroad—750 box cars of 50 tons capacity, 750 automobile cars of 40 tons capacity, 500 automobile and furniture cars of 50 tons capacity, 250 stock cars and 250 all-steel hopper-bottom coal cars of 55 tons capacity; International-Great Northern Railroad—50 box cars of 40 tons capacity and 100 self-clearing gondola cars of 50 tons capacity; New Orleans, Texas and Mexico Railway—100 ballast cars and 20 caboose cars. Orders for all of this equipment will be placed promptly after bids.

All of the foregoing is in addition to the equipment bought by the Missouri Pacific Railroad during 1926, consisting of 25 locomotives, 69 passenger-train cars, 2600 freight cars, 2000 refrigerator cars and 8 motorcars and the 15 locomotives, 20 passenger-train cars and 1050 freight cars also bought this year for the Texas roads in the system.

Baltimore and Ohio Railroad has ordered 20 Pacific-type passenger locomotives from the Baldwin Locomotive Works, to cost about \$1,200,000. The same system is also reported in the market for 2000 freight cars of different types and for 1000 hopper cars.

Santa Fe system is reported getting prices preliminary to ordering about 3000 freight cars.

It is estimated in the equipment market that orders for approximately \$35,000,000 of new equipment are immediately in view.

According to a report from Roanoke, Va., the Norfolk and Western Railway will add over 2000 freight cars to its equipment early next year. There will be 2000 all-steel, 70 tons capacity hopper cars and 250 all-steel automobile box cars and 25 all-steel caboose cars, besides 3 dining cars. Orders will doubtless be placed for the hopper cars and the dining cars as soon as bids are obtained; the rest of the equipment will probably be built in the company's shops.

There were 128 locomotives shipped from the principal locomotive-building plants during the month of November, according to reports received by the United States Department of Commerce at Washington, and this compares with

106 shipped in November of last year. In October of this year there were 151 locomotives shipped. Of the November total only four engines were for foreign purchasers.

Missouri Pacific Extension to Open Up 150,000 Acres of Farm Lands.

Harlingen, Texas, December 3—[Special.]—Contracts will be let soon for the construction of another branch line of the Missouri Pacific Railroad system in the Lower Rio Grande Valley, according to H. R. Safford, executive vice-president. The proposed road is authorized by the Interstate Commerce Commission. It will connect with the St. Louis, Brownsville and Mexico line of the system, one and a half miles north of Raymondville in Willacy county, and will extend due east nine miles and then nine miles southeast, ending near the Hidalgo-Cameron county floodway.

This extension will open up 150,000 acres of potential farm lands, of which 112,000 acres are still covered with mesquite and other timber. There are 22,000 acres in pasture and approximately 20,000 acres in cultivation at present. The land that will be opened is very fertile and is adaptable to citrus, garden and orchard growing, as well as field crops. Mr. Safford said. Several tracts are now being cleared up and will be cultivated by the time the road is finished.

Surveys of the extension will be completed during December. Estimates are now being prepared and material is being assembled, so that as soon as contracts are signed actual construction will start.

Southern Railway's Y. M. C. A. Sunday School.

James D. Burton, chairman of the Young Men's Christian Association on the Southern Railway system, Oakdale, Tenn., in the Cumberland Mountains, sends to the MANUFACTURERS RECORD a copy of the Southern News Bulletin for November, which contains an exceedingly interesting account by him of the Y. M. C. A. Sunday school for the train crews there. The school meets regularly every Sunday morning in the association building, and men coming off their runs find everything to facilitate their attendance. On account of the limited time of many of them, a majority who are present appear in their overalls, but for those who are not so pressed for minutes there is opportunity for a change of linen, and others who arrive on earlier trains get their breakfasts at Oakdale. Provision is made for all to get out on time, and some men while in their classes are called to go to their trains. Mr. Burton reports that the influence of the school is large and extensive. Community activities of all kinds are encouraged, and it is doing important work in the formation of character and promoting happiness and contentment.

Two Systems in Texas Plan Extensions.

Austin, Texas, December 4—[Special.]—With the purchase by the Missouri Pacific Railroad of the San Antonio Southern Railway, an important feeder for the former's International and Great Northern Line is obtained. Authority for its acquisition was granted by the Interstate Commerce Commission a few days ago, although it was opposed by the Missouri-Kansas-Texas Railway, which has engineers surveying for an extension of its system south from San Antonio to some point on the Lower Rio Grande border. The San Antonio Southern runs southward from San Antonio to Christine, Texas, 55 miles, and it traverses the same territory that the Missouri-Kansas-Texas plans to invade. It is announced that the Missouri Pacific will extend the acquired line to Hebronville, on the Texas-Mexican Railroad, if permission is granted by the Interstate Commerce Commission.

NOTABLE RAILROAD ELECTRIFICATION.

Big Baldwin-Westinghouse Two-Unit Locomotives for Great Northern—Tunnel 7½ Miles Long.

The electrification project now under way on the Great Northern Railway has attracted widespread attention among railway officials and electrical engineers because of the new system adopted and the retirement of one of the pioneer electrifications in America, a three-phase system, to give place to the new work. The present undertaking involves the revision of the original electrification between Tye, Wash., at the western end of the Cascade tunnel and the eastern portal of the same tunnel, and the extension of the electrification westward to Skykomish, Wash. The electrified mileage will thus be increased from 4 miles to 24 miles of main-line trackage, exclusive of yards.

This electrification project constitutes what is reported to be the first step in a program that will include 96 miles of main line, via a new tunnel, from Gold Bar to Wenatchee.

By eliminating the duplication of helper service, the delays caused thereby and other losses of time incident to steam operation, such as watering, refueling, standby losses, etc., the electrification is calculated to bring material savings in operating costs. In addition, it will permit faster train movement over the section involved and will virtually fulfill in every respect the requirements of present operating conditions. Consideration has been given to future requirements by an ample allowance for expansion.

In order to secure the advantages of alternating-current transmission and trolley and the direct-current traction motors, the motor-generator type of locomotive was chosen. This will draw power from an 11,000-volt, single-phase, 25-cycle trolley. By using this type of locomotive it is possible to take advantage of the inherent merits of both the alternating-current and the direct-current systems. This means high-voltage transmission to the locomotives with minimum copper loss and power loss, static unattended transformer stations along the railway line, light overhead construction, plus the advantages of direct-current traction motors, and practically unlimited flexibility of control in operation and regeneration.

The two new Baldwin-Westinghouse electric locomotives for the Great Northern each consists of two cabs which are identical, mechanically and electrically. Each one of these units is self-contained; that is, fully equipped to operate alone. Present plans are to operate two cabs as a road locomotive. Each locomotive weighs about 715,000 pounds, is 94 feet 4 inches long and has a continuous rating of 88,500 pounds tractive effort 15.5 miles per hour. Maximum allowable speed is 37.5 miles per hour and maximum rating is almost 7000 horsepower.

These two-unit locomotives are the most powerful of this type ever built. One of them has been delivered to the Great Northern at Skykomish and the other will be completed in December.

Simultaneously with the rehabilitation and extension of the original electric section, a new tunnel through the Cascade Mountains was begun, and when completed this will be the longest railway tunnel in America—7½ miles. The present line crosses the divide at an elevation of 3385 feet above sea level. It has sharp grades and curves, numerous snow sheds and several tunnels, one of which is the Cascade, 13,873 feet long. On account of heavy snowfall, which reaches a maximum of 410 inches at one point and 670 inches at the Cascade tunnel each season, it is difficult and expensive to keep the line open for operation. Increasing importance of a thoroughly dependable line, the necessity for additional snow sheds on the present route and the heavy repairs on the

existing snow sheds brought expenditures to a point where a new line on a lower level would show a substantial gain.

The new tunnel line will shorten the right of way more than $7\frac{1}{2}$ miles, eliminate nearly six complete circles of curvature and will escape most of the severe snow trouble. The grade will be the same as the present tunnel, but the elevation will be 500 feet lower. Electric power is being used throughout in its construction, which, it is expected, will be completed in about two years.

Board of Arbitration Awards Trainmen in East \$15,000,000 Increase in Pay, or $7\frac{1}{2}$ Per Cent.

The first decision made by the Railroad Board of Arbitration was given out last Thursday in New York, awarding to nearly 90,000 conductors and other trainmen on Eastern railroads a $7\frac{1}{2}$ per cent increase in pay, or approximately \$15,000,000 in the aggregate per year. The men had asked, through their organization, for an increase of \$1 per day, or 19 per cent, or a total of about \$38,000,000 per year. It is stated that the advance which has been granted averages about 42 cents a day per employee and about 50 railroads are affected. The award is effective as of December 1.

The vote of the Board was four to two, and it is explained that those voting for the award were Edgar E. Clark, former chairman of the Interstate Commerce Commission, and William D. Baldwin of the Otis Elevator Company, who together represented the public, and E. P. Curtis and Daniel L. Cease, who together represented the trainmen. Those who voted against the award were Robert V. Massey, assistant vice-president of the Pennsylvania Railroad in charge of personnel, and William A. Baldwin, operating vice-president of the Erie Railroad.

Two requests made for the trainmen were refused. One related to the beginning and the cessation of "time" for trainmen on duty, which the Board said it did not have power to decide; the other related to the assignment of a brakeman to certain trains. Some of the working conditions were changed or modified.

The Board was organized on October 27 and began its hearings immediately. The award is the result.

Freight Traffic Still Over 1,000,000 Cars a Week.

Loading of revenue freight for the week ended November 20 totaled 1,078,812 cars, the Car Service Division of the American Railway Association announces. This was an increase of 20,889 cars over the corresponding week last year and an increase of 67,893 cars over the same week in 1924. Due to the usual seasonal decline in traffic that takes place at this time in the year, the total for the week was a decrease of 34,074 cars under the preceding week. Since January 1 last there have been 48,586,821 cars loaded with revenue freight. During the same period in 1925 there were 46,600,612 cars loaded and in the corresponding period of 1924 there were loaded 44,180,415 cars.

Seaboard's Miami Extension Partly in Use.

Fort Lauderdale, Fla.—First freight shipments over the new rails of the Seaboard All-Florida Railroad West Palm Beach-Miami extension are now being brought into Fort Lauderdale and storage space in the new Seaboard automobile warehouse here is being used, pending completion of the regular freight depot. Freight service to Delray has been operative for two weeks, and only linking of the rails over the South New River canal here prevents the shipping of freight directly into Miami. Operation of the entire line for freight service is expected by December 15. Excellent progress is being made on the passenger and freight depots here, under construction by the Fred T. Ley Company of Miami.

LITTLE CREEK TERMINAL ORDERED BEGUN.

War Department Grants Permit and \$3,000,000 Plan Near Norfolk Starts.

Construction will begin immediately on the Pennsylvania Railroad's new freight terminal at Little Creek, near Norfolk, Va., according to a report from Philadelphia, which says that instructions have just been telegraphed to start work now, this action following the action of the United States War Department in issuing a permit to cover the channel work and the breakwater to be built.

As lately described in the MANUFACTURERS RECORD, the Little Creek improvement will embrace a tract of 1100 acres, will be over $4\frac{1}{2}$ miles long and will have 2 miles of waterfront. It is estimated that 1000 workmen will be employed on this job for three years, although it is estimated that by next summer it will be sufficiently advanced to permit the operation of Pullman cars to and from Virginia Beach from any part of the country. When the terminal is complete it will require about 1000 employees to operate it. It is estimated that \$3,000,000 will be spent.

At the mouth of Little Creek there will be two jetties, one on the east side being 1000 feet long and one on the west 500 feet long, these marking the entrance to a large harbor. New ferry steamers will be operated between Little Creek and Cape Charles across Chesapeake Bay, 25 miles, this distance comparing with 36 miles of the present route between Cape Charles and Norfolk. The steamers will carry both Pullman cars and numerous automobiles and will be an important link in a route to and from Florida and other Southern states.

The first work that will be done is the dredging of the channel and the building of the jetties. The construction is under the direction and supervision of A. C. Shand, chief engineer.

Poultry Raising Success Along Seaboard Air Line System.

Fred F. Abbott, development agent, Seaboard Air Line, Hamlet, N. C., has sent out a circular to its patrons, asking questions thus: "Are you raising cotton at a net return of \$34.08 per acre? Are you raising tobacco at a net return of \$91.70 per acre? Are you raising poultry at a net return of \$616 per acre?" In this manner he directs attention to the advantage of raising other crops. Continuing, he points out that the facts as to cotton and tobacco profit are based upon the 1925 year book of the United States Department of Agriculture, and that those relating to poultry were obtained from Dr. B. F. Kaupp, head of the poultry department of the North Carolina State Department of Agriculture. Emphasis is laid upon the importance of raising poultry and upon the results of poultry sales which are held at different places on the Seaboard's lines. The circular also says: "From good authority, we understand that at least 200 birds can be kept on one acre of land without fear of crowding and still furnishing ample room for ranging." Community carlot poultry sales along the Seaboard Air Line Railway for the twelve months ended June 30, 1926, disposed of 875,830 pounds of poultry, for which the producers were paid more than \$212,000 in cash. There was an increase of over 13 per cent as compared with the poultry movement last year.

The Seaboard Air Line Railway has appointed commercial agents as follows: E. P. Johnson and M. V. Simmons, 313 Clematis street, West Palm Beach, Fla.; E. H. Finney, 1114 Congress Building, Miami, Fla. E. O. Kinnier is district freight agent, with office at West Palm Beach.

GOOD ROADS AND STREETS

Highway Education Board Reorganized to Enlarge Scope of Operations.

Washington, December 6—[Special.]—Reorganization of the Highway Education Board to include an enlarged personnel and wider scope of operation was effected at a series of meetings held here recently. The effect will be to open for the Board, already known in the United States and abroad for its educational activities in the realm of highway transport and highway engineering, a wider field of co-operation with other groups interested in sound highway development the world over.

The officers of the Board, as reconstituted, consist of Thomas H. MacDonald, Chief of the United States Bureau of Public Roads, as chairman; Dean F. L. Bishop, School of Engineering, University of Pittsburgh, treasurer, and Pyke Johnson of the National Automobile Chamber of Commerce as secretary. Other members include J. Walter Drake, Assistant Secretary of Commerce; Wilbur J. Carr, Assistant Secretary of State; Dr. Leo S. Rowe, Director General of the Pan-American Union; Dr. John J. Tigert, United States Commissioner of Education, Department of the Interior; Roy D. Chapin and H. H. Rice of the National Automobile Chamber of Commerce; H. S. Firestone and W. O. Rutherford of the rubber industry, and Fred I. Kent of the Investment Bankers' Association. The American Association of State Highway Officials will be represented by a member not yet selected.

In this manner all the various agencies concerned in an educational program dealing with engineering, safety, economics, research and finance are brought together in one organization pledged to a sound program of advancement in highway transport affairs. Four Government departments, as well as the Pan-American Union and the leading industries concerned, such as the automobile, rubber and accessory manufacturers, are grouped with educational leaders, Dr. Tigert and Dean Bishop, in the new organization.

\$3,150,000 for New South Carolina Bridges.

Columbia, S. C.—Twenty-one bridges, costing from \$10,000 to more than \$500,000 each, are under construction in various parts of the state. The most costly bridge now being built is that between Richland and Lexington counties over the Congaree River, at an expenditure of \$531,000. The next in order of cost is the bridge between Clarendon and Orangeburg counties over the Santee River, to involve about \$427,000. The total estimated cost of the major projects in the state is \$3,150,000.

Will Sell \$500,000 Paving Bonds.

Spartanburg, S. C.—Proposals will be received until December 14 by the County Board of Spartanburg County, John A. Law, chairman, for the purchase of \$500,000 of bonds to pave a section of state highway No. 8 from the city limits of Spartanburg, via Duncan, to the city limits of Greer. The bonds will be issued in accordance with an Act of the General Assembly of South Carolina authorizing the issuance of \$1,000,000 of bonds.

Oklahoma to Award \$500,000 of Contracts.

Oklahoma City, Okla.—Contracts are expected to be awarded on December 21 by the Oklahoma Highway Commission for the construction of approximately 15 road projects to cost around \$500,000. The work will be carried forward in a number of counties.

Alabama to Act on \$25,000,000 Bond Issue.

Montgomery, Ala.—For the purpose of submitting a \$25,000,000 bond issue for the construction of roads, Governor W. W. Brandon of Alabama has called an extra session of the legislature for December 28. The Governor's call contains also a proposal that the legislature levy a two-cent gasoline tax in addition to one already levied.

\$125,000 for Bridge Over St. Marys River, Georgia.

Waycross, Ga.—Construction will begin soon on a new bridge across the St. Marys River at Folkston. It will be a duplicate of the memorial bridge across the Satilla at Waycross and will cost about \$125,000. The structure will be 361 feet long.

Tennessee Invites Bids.

Nashville, Tenn.—Bids will be received until December 17 by the Department of Highways and Public Service, at its office in this city, for grading and drainage work on approximately 80 miles of roads in several counties of the state and for the construction of a number of bridges. It is estimated that the work will cost \$1,000,000.

Virginia Offers \$2,500,000 Highway Certificates.

Richmond, Va.—Bids will be received until December 15 by the Sinking Fund Board, with offices in the Library Building, this city, for the purchase of \$2,500,000 of state highway certificates of indebtedness. These are a part of a total of \$7,500,000 authorized by the General Assembly to secure funds for the repayment of loans made the state under the provisions of the Robertson Highway Construction Act. They will bear an interest rate of 4½ per cent.

Louisiana Asks Bids on 20 Miles.

Baton Rouge, La.—Bids have been asked by the Louisiana Highway Commission for two road projects to cover a total of more than 20 miles, one of which is a state project in Jackson parish and the other a Federal-aid project in Jefferson Davis parish. The former extends for a distance of approximately 6.65 miles and the latter, of gravel, will cover 12.18 miles. Proposals on the Jackson parish work will be received until December 16 and on the Jefferson Davis parish project until December 21.

Nine Texas Counties to Vote on Bond Issues for Lee Highway Construction.

Floydada, Texas.—As a result of a movement inaugurated at a meeting of citizens in Floyd county in September plans are maturing for financing the construction of the Lee highway in Texas. At that meeting the Floyd County Lee Highway Association was organized, with Mack Stevenson of Floydada, president. Since then associations have been organized in other counties of the state under the direction of R. P. Johnson, representing the national association, with offices in Washington.

According to present plans, elections will be held simultaneously on January 4 in nine counties interested in the project on bond issues to finance the work. The road through Texas will extend for a distance of more than 200 miles and will pass through the following counties: Wilbarger, Foard, Cottle, Motley, Floyd, Hale, Lamb, Bailey and Parmer.

TEXTILE

Galvez Mills Begin Operations.

Galveston, Texas.—A part of the machinery in the new plant here of the Galvez Mills has been put into operation and it is expected that the mill will be in full operation by the middle of January. W. L. Moody 3d is president of the company.

New Mississippi Mill to Start Production.

Meridian, Miss.—It is announced that the Roundtree Cotton Mills, Inc., of this city will begin operations on December 15. This company, lately organized, has recently purchased the Lauderdale Cotton Mill of Lauderdale, Miss., and the Magnolia Cotton Mill of Magnolia, Miss. Its officers include J. A. Roundtree, president; F. J. Hughes, vice-president, and H. D. Simpson, treasurer, all of Meridian. C. R. Miller of Dallas, Texas, is chairman of the board.

\$200,000 for Mill Improvements at Pine Bluff.

Pine Bluff, Ark.—A \$50,000 building has been completed for the Monticello Cotton Mills Company here and workmen are installing \$150,000 worth of new machinery to be ready for operation by January 1. Additional operatives, numbering 150 to 200, will be employed, bringing the total for the plant to about 500. Completion of the new building and installation of the new machinery will increase the total investment in the mill from about \$400,000 to \$600,000.

Bids Asked for Building Cotton Mill.

Charles T. Main, Inc., of Boston, Mass., engineer for the new tire-fabric mill to be erected at Albany-Decatur, Ala., for the Connecticut Mills Company of Danielson, Conn., wires the MANUFACTURERS RECORD that construction bids will be received until December 16. As previously detailed, the buildings will be erected by the Textile Realty Company, of which Thomas A. Bowles of Albany-Decatur is president, and will be leased to the Connecticut company. The plant will be equipped with 32,000 spindles to be brought from Connecticut and with sufficient twisting and weaving machinery to balance the equipment.

New Company to Make Cloth, Dye and Polish.

J. E. Taylor of Griffin, Ga., in a letter to the MANUFACTURERS RECORD outlines plans of the Taylor Textile Corporation, to be organized for the manufacture of cloth and the production of dye and polish. It is the purpose of the company to establish its first unit at Griffin to make cotton cloth, to be dyed and polished with vegetable dyes produced in a plant established in connection with the cloth manufacture. Dye plants will also be established at mills where cotton is manufactured into blue serge cloth and where it is desired to use this new process.

Details for construction of the proposed plants have not been determined.

\$5,000,000 Cotton Finance Corporation.

Dallas, Texas.—Papers of incorporation are expected soon for the proposed \$5,000,000 Texas Cotton Finance Corporation, according to J. A. Pondrom of this city, chairman of the organization committee. The corporation will function in conjunction with the Federal intermediate banks, it is stated, and it is estimated that \$50,000,000 will be available to Texas farmers in order to enable them to hold their 1926 cotton crop for better prices. The new corporation expects to withdraw 1,250,000 bales from the market.

MECHANICAL

Fire Fighter for Central Stations.

In the accompanying picture is shown a new and improved kind of fire extinguisher known as "The Central Station Fyr-Fyter," which is of the carbon-tetrachloride type and is

made in one and two gallon sizes by the Fyr-Fyter Company of Dayton, Ohio, who say that this device is the latest product of their research division and that it was designed to be a unit of first-aid fire-protection equipment in central stations in accordance with the ideas of two of the leading electric-power station construction engineers.

It is especially adapted for use in electric-power stations, sub-stations, transformer houses, electric locomotives, car barns, industrial plants, paint stores, gasoline-filling stations, dry-cleaning establishments, etc., where the added quantity of extinguishing liquid is of importance. It is simple and rugged in construction and will throw one or two gallons of carbon tetrachloride through the one-eighth-inch nozzle over a distance of from 40 to 45 feet with very little pumping effort.



THE NEW FIRE EXTINGUISHER.

The pump is of the single-acting, double-discharge type, provided with a compression chamber which renders the stream continuous; there is no appreciable dying down of the stream between strokes of the pump. Moreover, the construction is such that the pump may be taken apart by the

owner without the aid of tools. There are no valves to leak or pressure to maintain, or gauges or other parts to get out of order. The extinguisher may be tested without loss of liquid by directing the stream back into the tank through the fill opening. All working parts can be readily removed. It has been approved by the Underwriters Laboratories.

New Large Capacity Gasoline or Electric Shovel.

In the illustration herewith is shown a gasoline or electric shovel of one and a quarter cubic yards capacity, which has been designed and produced by the Osgood Company of Marion, Ohio, who report an increasing demand for gasoline and electrically driven equipment, as well as a demand for a larger machine than their one-yard shovels, to meet which latter the new addition to their line is now being marketed.

This new machine is distinguished by a remarkably clean and simple design, many refinements adding to its efficiency, together with great structural strength. Economical operation, which is characteristic of gasoline or electric power, remains undiminished. In addition to shovel work, this machine is efficient as a crane, with hook block or clamshell bucket, and also as a dragline excavator, without necessitating any changes or additions to the operating machinery, the only change being the booms and buckets.

The machine is built up almost entirely of open-hearth and alloy-steel castings and little cast iron or structural steel enters into its construction. Only four friction clutches are

used in its usual operation. These are of the outside contracting band type and are easily adjusted and renewed. Gearing is by plain spur gears, the number being reduced to a minimum. All upper-body gears have teeth machine-cut from the solid metal. The shovel is mounted as standard on an enclosed gear-drive, continuous-tread truck of simple and rugged design.

The chief features of construction are the all-gear drive, with enclosed gears running in heavy oil; large supporting area of tread belts, steering from the upper body in any position, with ability to turn gradually or on machine's own center axis, and an underside clearance of 12 inches. The shovel crowding is accomplished by a very simple wire-rope mechanism which is self-adjusting to all boom angles and



LARGE-CAPACITY SHOVEL AT WORK.

involves no chains or other complications. Among other features are the manganese front dipper; combination oak and steel boom and handle; special Osgood 6-cylinder gasoline engine, with accessories, including self-starter as standard; two-finger control of the drum clutches through the "Osgood Servo" mechanism; an all-steel house, with enclosed front and the combination gasoline tank and counterweight.

Interesting Use of Loaders on Paving Boulevards.

The accompanying picture shows two of four Haiss Loaders owned by the American Asphalt Paving Company of Chicago, used with advance storage of aggregates in city paving. When the pictures were taken, these two loaders—one on stone and one on sand—were working together on the paving of boulevards near the Field Museum and the Soldiers and Sailors' Stadium in Grant Park.

Stone and sand were piled on a boulevard as near the work as possible in two piles about 100 feet apart. Cement was piled on a truck between the two loaders. Reversible two-batch trucks were used to feed the 27-E paver. Each truck would receive two batches of stone, then two of sand, and finally the cement.

The concrete was for a foundation course to be covered with asphalt. Four bag batches of 1:3:6 concrete were poured, requiring 12 feet of sand and 24 feet of stone each. The stone hopper was filled in 20 to 28 seconds and struck-off, and dumped in 5 seconds. The sand hopper was filled in 15 to 20 seconds and struck-off, and dumped in 4 seconds. As the specifications call for 1 minute in the drum, the loaders had considerable capacity to spare.

The contractor reports that they never placed less than 2000 square yards of 6-inch concrete in 8 hours.

It will be noted that the loaders are equipped with 1926 precision hoppers, which can be lowered on a horizontal shaft to give overhead clearance of 10 feet 2 inches. The feeding

propellers are followed by a recently developed clean-up scraper.

From the point of view of one interested in loaders, the outstanding feature of the operation was the ease of handling and adjustment not only of the precision hoppers, but of the



TWO LOADERS AT WORK ON THE JOB.

loaders themselves. The transmission and controls in the loader, which is built by the George Haiss Manufacturing Company, Inc., of New York city, are designed and built for loader operation only. The speeds are those best suited to loaders, and the controls are the simplest and most efficient possible—one motion for each operation.

Kansas City a Center of Tank Manufacture—Ten Companies Employ 2200 Workers.

A recent issue of the Kansas City (Mo.) Star carried a comprehensive review of the steel-tank-manufacturing industry of this city, indicating that it takes first rank among the cities of the country in such manufacture. Ten companies employ approximately 2200 workers; of these 1800 are factory employes, producing tanks ranging in capacity from one gallon to 80,000 barrels. Every known type is manufactured, including riveted and bolted tanks, welded tanks, riveted and soldered tanks and lock-seam small tanks. The annual output of the plants is about 120,000 tons.

Companies engaged in the industry embrace the following: American Steel Works, which is starting an expansion program to double its output; Black, Sivalls and Bryson Manufacturing Company, making tanks in sizes from 25 barrels to 10,000 barrels; Butler Manufacturing Company, which has completed a large addition to its plant; Columbian Steel Tank Company, established in 1894 and now engaged in an expansion program to involve the erection and equipment of new buildings, one of which was completed during the past year; Kansas City Steel Tank Company, manufacturing tanks in capacities of one gallon to 15,000 gallons, and contemplating an extensive expansion program; Kansas City Structural Steel Company, making tanks in sizes ranging from 300 barrels to 80,000 barrels and maintaining a construction crew of 200 in the field; Kaw Steel Construction Company, producing tanks in sizes of from 100 barrels to 80,000 barrels; Missouri Boiler Works, manufacturing oil tanks up to 25,000-barrel capacity; Standard Steel Works, building tanks up to a 35,000-gallon capacity, and the Superior Steel Tank Company, specializing in oil tanks up to a 20,000-gallon capacity.

The tanks are produced in large numbers and find a market throughout the United States and in foreign countries.

Fort Pierce, Fla., has sold \$280,000 general improvement bonds to Stranahan, Harris & Oatis, Inc., of Toledo, Ohio.

CONSTRUCTION DEPARTMENT

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained.

An asterisk (*) following an item indicates that the enterprise has been reported in a preceding issue.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers, and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$30.00 a year.

Airplane Plants, Stations, Etc.

Ga., Atlanta—City will probably expend about \$25,000 or \$30,000 developing Candler Field as municipal airport, work to consist of grading, new runway and equipping field with boundary and flood lights; W. A. Hamsell, Ch. of Construction, have charge of grading and R. C. Turner, City Electrician, have charge of lighting.

Okla., Tulsa—Mid-Continent Aircraft Co., capital \$30,000, incorporated; Willis C. Brown, 2240 S. St. Louis St.

Va., Richmond—Richmond Air Junction Assn., Henry Woodhouse, 280 Madison Ave., New York City, reported soon begin erection of hydrogen generating plant of 100,000 cu. ft. capacity.*

Bridges, Culverts and Viaducts

Proposed Construction

Fla., Jacksonville—Duval County Comms., Frank Brown, Clk., received low bid from E. W. Parker, 305 Cass St., Tampa, at \$83,622 for 2442 ft. creosoted timber pile highway bridge over Julington Creek, between Duval and St. Johns Counties.*

Fla., Pensacola—Escambia County Comms., H. E. Gandy, Chmn., receive bids December 28 to reconstruct rolling lift highway bridge over Bayou Chico, at Pensacola, 1505 lbs. reinforcing steel, 25,228 lbs. new structural steel, 37,840 lbs. old steel reworked or replaced, 9504 ft. creosoted timber; plans from M. L. Bell, County Clk., and W. E. Wheat, County Engr.*

Fla., St. Petersburg—Treasure Island, Inc. (Donovan & Son), Sixth St. and Central Ave., plans about 1 mi. causeway over Treasure Island, from western terminus of Central Ave. to Gulf; causeway from eastern end consists of 2 short bridge spans, 2182 ft. fill, 2400-ft. bridge span and 1814 ft. fill.

Ga., Louisville—State Highway Dept., East Point, receives bids Dec. 22 for wooden bridge over Ogeechee River on Swainsboro-Louisville road, Jefferson County.

Miss., McComb—City and Illinois Central R. R. Co., A. F. Blaes, Ch. Engr., Chicago, Ill., interested in building east approach to viaduct over Illinois Central R. R. tracks.

Miss., Vicksburg—Warren County plans bridge building. See Roads, Streets, Paving.

Missouri—State Highway Comm. will build and improve 18 bridges. See Roads, Streets, Paving.

Mo., Jefferson City—Cole County Court receives bids Dec. 16 for 3 reinforced concrete bridges and 200 cu. yd. rock excavation; plans from County Clk. and James H. Jones, County Highway Engr.

N. C., Asheville—City Planning Comm., John H. Cathey, Mayor, recommends 250-ft. bridge connecting Chestnut St. and West Chestnut, cost about \$25,000.

S. C., Charleston—Sanitary and Drainage Comm. approved plans for bridge across Breach Inlet, connecting Isle of Palms and Sullivan's Island.

Texas—See Roads, Streets, Paving.

Tex., Austin—State Highway Dept., Eugene T. Smith, Chmn., completing plans for \$300,000 highway bridge across Brazos River on Austin-Houston Highway.

Tex., San Antonio—City Comm. received low bid from Walsh & Burney, 928 N. Flores St., at \$25,357 for 77-ft. reinforced steel and concrete, 2-span bridge over San Antonio River, in Villita Street extension, through Bowen's Island to Dwyer Ave.

W. Va., Clay—Clay County Court plans steel bridge on concrete piers over Elk River, about 1 mi. above Clay R. R. station,

two 150-ft. channel spans, two 100-ft. other spans.

W. Va., Fayetteville—Fayette County Court, Thomas Boone, Clk., receives bids Jan. 5 for substructure for bridge over New River at Stone Cliff, 2600 cu. yd. plain and reinforced concrete, 2830 cu. yd. excavation, 85,530 lbs. reinforcing steel; plans from Geo. H. Siems, County Road Engr.

Contracts Awarded.

Fla., Haines City—City, J. J. Hill, City Engr., let contract to Walter W. Hoops & Staff, Lake Wales, for concrete slabs and hand rails on steel and reinforced concrete bridge over A. C. L. R. tracks.*

Fla., Vero Beach—F. G. Fletcher, Eau Gallie, has contract for wood work in connection with Vero Beach-Vero Beach Villas causeway.

Mo., Louisiana—William R. Compton Co., Peabody, Houghteling & Co., Inc., and Lorenzo E. Anderson & Co. are offering \$800,000 first mortgage sinking fund 7% Missouri-Illinois Bridge Co. gold bonds. Construction contracts lately noted let.

N. C., Hendersonville—City, R. R. Arledge, Clk., let contract to C. H. Knight for 2 concrete culverts over Wash Creek, Lenox Park.*

N. C., Winston-Salem—W. W. Boxley Co., Boxley Bldg., Roanoke, Va., has contract at \$40,000 to \$50,000 for concrete single arch bridge over Winston-Salem southbound railway on Halled St.

Tex., Angleton—See Roads, Streets, Paving.

Clayworking Plants

Miss., Hattiesburg—Long's Pressed Brick and Building Material Manufacturing Co., capital \$25,000, incorporated; J. F. Long, 607 Elizabeth Ave.

Miss., Yazoo City—J. A. Ashworth and W. H. Bell, Kosciusko, reported interested in establishment of brick plant.

Tex., Stamford—Texas Clay Manufacturing Co., capital \$60,000, incorporated; H. L. Park, S. B. Tadlock.

Coal Mines and Coke Ovens

Tenn., Columbia—Phoenix Fuel & Mining Co., capital \$100,000, incorporated; F. A. Berry, J. S. Arnold.

Tenn., Crossville—Cumberland Coal Co., capital \$25,000, incorporated; Lucien Clark, Christine McCormac.

Tenn., Harriman—New Blizzard Coal Co. of Oakdale, reported leased coal mine properties from the Chattanooga Gas Co.; will develop.

West Virginia—West Virginia Southern Coal Co. formed by purchase and merger of J. E. B. Siler mining interests and other coal properties up Big Coal river, on Little Coal river, on Horse Creek, valued at approximately \$4,700,000; properties operated, 13,362 acres March Fork Coal Co., Birch Fork Coal Co., Seng Creek Coal Co., Leevale Coal Co., Silush Coal Co., Vanball Coal Co., Basic Coal Co., Burgess Branch Coal Co. and Siler & Siler; production from these properties approximately 1,000,000 tons annually; Everett Drennen, Pres.; Walter H. Cunningham, V. Pres., First Nat'l Bank, Huntington. Syndicate composed of John Nickerson & Co., New York; A. L. Chambers & Co., Inc., Schoellkopf, Hutton & Pomeroy, Inc., and Manufacturers and Traders Trust Co., Buffalo, and the Equitable Trust Co. (Baltimore) and J. A. W. Iglehart & Co., Baltimore, Md., are now offering at 95 and interest to yield about 7.10% an issue of \$1,350,000 West Virginia Southern Coal Co. first mortgage and leasehold gold bonds, 7% series of 1947; bonds will be secured by direct first mortgage on all fixed assets of the company and by first lien on leasehold interests in coal lands. T. E. B. Siler, Charleston, announces

no change to be made in either the selling or operating department of any of the companies; new company to take charge Jan. 1, 1927, and will have over \$600,000 in cash working capital.

W. Va., Beury—Southern Smokeless Coal Co. organized; W. D. Guyer, S. A. Moore, Moore Bldg., both Charleston; Geo. R. Bullock of Thurmond; reported acquired the Beury Coal & Coke Co.; will operate.

Concrete and Cement Plants

Ark., Batesville—The Missouri Portland Cement Co., Post Dispatch Bldg., St. Louis, Mo., has acquired about 416 acres land for erection cement plant.

Mo., Kansas City—Atlas Tile Co., capital \$12,000, incorporated; R. E. Martin, 715 Commerce Bldg.

Cotton Compresses and Gins

Tex., Beaumont—Beaumont Cotton Compress Co., capital \$50,000, incorporated; Roland Jones, Sr., B. R. Novell, 615 Fifth St.

Tex., Beaumont—Thompson-Lockhart Electric Co., 794 Pearl St., Beaumont, will probably receive contract at \$1498 for installing electrical equipment in municipal warehouse and compress; Pittsburgh-Des Moines Steel Co., Praetorian Bldg., Dallas, will probably receive contract at \$7980 for erecting 100,000 gal. water tank on 100-ft. steel tower.*

Cottonseed-Oil Mills

Tex., Floresville—Floresville Cotton Oil Co., capital \$90,000, incorporated; S. V. Houston, W. R. Wiseman.

Drainage, Dredging and Irrigation

Tex., Brownsville—Directors of El Jardin Water Dist., known as Cameron County Water Improvement Dist. No. 6, will vote December 21 on \$600,000 bonds for completion of drainage work; contract for dredging has been let to Callahan & Robertson; work started. Oscar C. Dancy, County Judge. See Financial News—Bond Issues Proposed.*

Tex., Eagle Pass—Kinney and Maverick County Water Improvement Dist. No. 1, T. S. Wyche, granted permit by State Board of Water Engrs., Austin, for irrigation project, gravity system, reclaiming about 60,000 acres; work to start within 90 days and completed within 3 years; estimated cost \$1,000,000.

Tex., Karnes City—Karnes County Irrigation Dist. No. 1, care of J. B. Carrington, Bedell Bldg., San Antonio, will expend approximately \$2,000,000 for irrigation project; includes concrete dam about 110 ft. high; reclaiming between 60,000 to 75,000 acres. (See Financial News—Bond Issues Proposed.)

Tex., Paris—Suprvs. of Lamar-Delta County Drainage Dist. No. 2 received low bid from G. H. Edmunson of Greenville at \$120,625 for clearing, grubbing and excavation of channels and laterals; soon begin work.*

Electric Light and Power

Large sums are being expended for electric light and power work in connection with Land Development operations. Details will be found under that classification.

Ala., Hartford—City voted to retain municipal lighting plant. Address The Mayor.*

Ark., Gould—Gould Light and Ice Co., D. V. Leatherman, Pres., reported to rebuild

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electric light and ice plant, burned at loss of \$50,000.

Ark., Texarkana—City plans improvements to street lighting system. Address The Mayor.

Florida—Florida Power & Light Co., 31 Civic Bldg., Miami, reported authorized expenditure of \$732,942 for local extensions and improvements in 67 cities and communities in Florida.

Florida—Fitch Utilities, Inc., New York, granted preliminary permit by Federal Power Com'n., Washington, for power project on Sante Fe River in Alachua and Columbia Counties; work includes construction of concrete spillway and earth embankment forming dam 20 ft. high and 200 ft. long, creating a reservoir 22 miles long; develop approximately 1650 h. p.

Fla., Jacksonville—City Comm., Frank H. Owen, Chmn., reported to soon begin construction of addition electric light and power plant; Schofield Engineering Co., Commercial Trust Bldg., Philadelphia, Pa., Consult. Engr.

Fla., Lady Lake—Florida Power Corp., W. P. Wallace, V. P., St. Petersburg, reported to furnish electric current to city and provide street lighting system.

Fla., St. Augustine—City, Eugene Masters, Mgr., is receiving bids for white-way system.

Fla., St. Petersburg—Chicago Bridge & Iron Works, 2106 Old Colony Bldg., Chicago, Ill., has contract for oil storage tank at municipal power plant.*

Mo., Great Falls—E. H. Rollins & Sons, 41 Wall St., New York, reported interested in development of hydro-electric power at Great Falls; company proposes to construct plant and install equipment if Government will build the dam.

Miss., Carrollton—Mississippi Power and Light Co., Jackson, reported acquired municipal electric light plant.

Mo., Pleasant Hill—Missouri Public Service Co. incorporated; Sam Sparrow, 3641 Campbell St., Kansas City.

Mo., Poplar Bluff—Black River Hydro-electric Co., office in Poplar Bluff, St. Louis and New York, H. D. Mephram, Pres., New York; W. A. Fuller, Sec., St. Louis; W. H. Meredith, V. P. and Atty., Poplar Bluff; reported to begin construction of proposed hydro-electric power dam near Piedmont; let contract to Weldon Well Co. for drilling for foundation location; dam will be 135 ft. high and 1500 feet long.*

Okla., Taloga—City plans constructing electric light and power plant; may vote on \$15,000 bonds. Address The Mayor.

S. C., Anderson—American Land & Improvement Co., 432 Seventh Ave., New York, reported to have acquired power rights at Middleton Shoals on Savannah River for hydro-electric development; J. C. Cooper 65 Wall St., New York, interested.

Tenn., Bethpage—Tennessee Electric Power Co., Chattanooga, and J. H. Shoulders, Chrm. Electric Light Committee, reported interested in establishment of electric line from Hartsville to Westmoreland by way of Castalian Springs.

Tenn., Union City—J. P. Minck, Tulsa, Okla., reported offered city commissioners \$500,000 for water and light plant.

Tex., Crystal City—Central Power & Light Co., Frost National Bank Bldg., San Antonio, reported to improve power plant, install new equipment.

Tex., Uvalde—Central Power and Light Co., Frost National Bank Bldg., San Antonio, advises: "Have let contract for transmission line from Uvalde to Sabinal to L. E. Myers Co., Allen Bldg., Dallas."

Tex., Quitaque—See Ice and Cold Storage Plants.

W. Va., Fairmont—West Penn Securities Dept., Inc., West Penn Bldg., 14 Wood St., Pittsburgh, Pa., are offering 30,000 shares of Monongahela West Penn Public Service Co. (subsidiary of West Penn Electric Co.) 7% cumulative preferred stock; company operates electric light, power and railway in state of West Virginia under control and supervision of American Water Works and Electric Co.

W. Va., Huntington—Appalachian Electric Power Co., Bluefield, reported to expend \$500,000 during 1927 for expansions and improvements; work includes construction of 30,000-volt power line from American Gas & Electric Co.'s transmission depot at South Point, Ohio, to Huntington; cost \$75,000; rebuilding present 33,000-volt circuit from Kenova power plant to Huntington; constructing switching frame or switch yard on Kentucky side of river at plant of American Rolling Mills, to be operated from power plant at Kenova; power line from

South Point transmission depot to Ironton furnishing power for Ironton and vicinity.

Fertilizer Plants

Va., Amherst—Virginia-Carolina Chemical Co., 11 S. 12th St., Richmond, reported transferred to Virginia Chemical Corp. fertilizer plant on James River.

Va., Petersburg—Camp Fertilizer Co., capital \$500,000, incorporated; L. Smith Acee, 111 Central Park.

Flour, Feed and Meal Mills

Okla., Oklahoma City—Belt Mill and Grain Co., capital \$25,000, incorporated; Esther White, Frank Hardin.

Okla., Welch—Craw County Grain Co., capital \$25,000, incorporated; N. E. Cole, J. D. Cole.

Tex., El Campo—El Campo Rice Milling Co., R. H. Hancock, Secy., are having plans prepared for feed and rice mill with daily output 6 cars; 4-story mill building, 26x40 ft. and 2-story warehouse, 100x100 ft.; frame, iron clad; wood floors; composition roof; cost of buildings \$30,000; cost of equipment \$25,000; will open building and machinery bids about Dec. 15. (See Machinery Wanted—Rice and Feed Mill Machinery.)

Foundry and Machine Plants

Mo., Kansas City—The Gleaner Harvester Corp. of Independence, Mo., being refinanced and reincorporated; W. J. Herman, Pres.; W. B. Chauncey, Sec.-Treas.; S. W. Ramey, Gen. Mgr.; acquired site in new Fairfax industrial district; plans erecting factory, including large foundries and other equipment; new company to be known as The Gleaner Combine Harvester Corp., with S. Hugh Hale, 636 Westover Rd., Chrmn. of Board.

Mo., Springfield—The Springfield Foundry Co., W. P. Powell, Mgr., Concord Ave. and Phelps St., begun construction of new building at 316 W. Mill St.; steel frame covered with sheet iron, concrete foundation and floors; contract awarded to Acme Foundry & Machine Co., 616 N. Jefferson St., for erection of steel frame; equip with modern machinery.

Mo., St. Louis—Standard Railway Equipment Co. incorporated; Roland S. Baker, 415 Pine St.

N. C., Winston-Salem—Carolina Iron Co., successors to the Carolina Foundry & Machine Co. incorporated; C. M. Thomas, Pres., N. Main St.; will rearrange and remodel machinery in plant on Chestnut St. and South-ern Railway.

Tenn., Nashville—Machine Shop, etc.—Allen Manufacturing Co., Tenth and Cedar Sts., has permit for construction of warehouse and repairs to buildings, estimated cost \$11,000.

Gas and Oil Enterprises

Ark., Camden—Home Refining Co. increased capital, \$50,000 to \$300,000.

Fla., St. Augustine—St. Augustine Gas and Electric Light Co., G. W. Curran, Pres., 7 King St., votes Dec. 14 on increasing capital, \$350,000 to \$600,000.

Ky., Owensboro—Mid-Continent Petroleum Co., Will J. Cooke, Mgr., Tulsa, Okla., reported to erect fireproof bulk depot, 30x75 ft., and construct three 15,000 gal. tanks at S. E. cor. Fourth St. and Illinois Central R. R.

La., New Orleans—Nola Oil Co., Inc., capital \$30,000, chartered; Joseph Gallo, 1300 Howard St.

La., Shreveport—Corco Oil Refining Co. has contracted with Graver Corp., East Chicago, Ind., for 2 high pressure Jenkins cracking process units; equipment to be installed at Shreveport refinery of this company.*

Mo., Cumberland—Central Public Service Co., 209 S. LaSalle St., Chicago, Ill., reported acquired property of Cumberland and Allegheny Gas Co., supplying natural gas in this territory from West Virginia fields. Company wires: "We expect to acquire Cumberland and Allegheny Gas Company Tuesday."

Mo., Kansas City—D'Yarmett & Herndon, Room E, New York Life Bldg., will build 20 small oil refineries in addition to one now building at Burlington, Iowa; others located in Texas, Kansas, Missouri, Iowa, Illinois, Oklahoma, Montana; each plant requires one still house, 30x40 ft., concrete floors, steel frame and corrugated iron covering, 1 pump house and filling station 24x36 ft.; cost of buildings \$100,000; install stills, condensers, pumps, piping, tanks, electric motors, valves, thermometers; cost of equipment \$250,000; are owners of patent rights for a "foolproof"

refinery to be installed in small units placed at points of consumption called "fitney refineries" and are being installed by filling station owners and bulk marketers; U. E. Wiesendanger, Constr. Engr., Room E, New York Life Bldg. [See Machinery Wanted—Tanks (Welded); Pump (Centrifugal); Pumps (Electric); Heat Control Valves; Laboratory Equipment; Heat Insulation; Valves and Piping; Stills; Steel Buildings; Filling Station Equipment.]

Mo., Kansas City—Home Oil Products Co., capital \$20,000, incorporated; John T. Berry, 32 W. Fifty-eighth St.

N. C., Greenville—Westbrook Drilling Corp. incorporated; Warder Westbrook, J. L. Westbrook.

N. C., Winston-Salem—North Carolina Public Service Co., T. R. Warren, Local Mgr., reported to improve gas system, construct high pressure distribution system to outlying districts, pumping station and high pressure holder with capacity 50,000 cu. ft.*

Okla., Duncan—Medinah Oil Co., incorporated; G. B. Wise, W. C. Lewis.

Okla., Oklahoma City—United Standard Royalties, Inc., capital \$25,000, incorporated; G. R. Duggan, C. W. Conner.

Okla., Oklahoma City—Contractors Oil Co., capital \$25,000, incorporated; C. J. Hobson, 1643 W. Tenth St.

Okla., Tulsa—Liberty Royalties Co., capital \$500,000, incorporated; R. F. Garland, Atlas Life Bldg.

Texas—Roxana Petroleum Corp., Shell Bldg., St. Louis, Mo., acquired 800 acres land in Winkler County; no definite plans for development at this time.

Tex., Amarillo—R. J. W. Oil Co., capital \$20,000, incorporated; J. C. Crews, 902 S. Alabama St.

Tex., Amarillo—Great Plains Oil and Gas Co., capital \$200,000, incorporated; John McKenzie, A. T. Brice.

Tex., Amarillo—Panfield Royalty Co., capital \$100,000, incorporated; J. H. McCracken, Amarillo Bldg.

Tex., Austin—Gulf Pipe Line Co. and Magnolia Pipe Line Co. reported to co-operate in constructing pipe line from connections with their trunk lines in Ranger district to Panhandle field, lines to be used to transport oil for both companies; later plan construction of second line; total capacity of 2 lines will be 100,000 bbls. daily; pipe and equipment ordered.

Tex., Austin—E. L. Proper & Co., capital \$10,000, incorporated; A. R. Proper, W. R. Yeager.

Tex., Dallas—Homer Chapman Oil Co., capital \$50,000, incorporated; Homer Chapman, Southland Life Bldg.

Tex., Dallas—Sabine Drilling Co. incorporated; W. G. Banks, L. G. Good.

Tex., McCombs—Humble Oil and Refining Co., Humble Oil Bldg., Houston, reported to construct 50,000 bbl. oil refinery.

Tex., Port Arthur—Port Arthur Oil and Development Co. increased capital, \$50,000 to \$100,000.

Tex., Rockdale—Gaither Production Co., capital \$16,000, incorporated; W. E. Gaither, E. H. Noack.

Tex., San Antonio—Witherspoon Refining Co., incorporated; E. M. Corah, 417 Main St.

W. Va., Charleston—Conley & Johnson, Atty.s., advise that incorporators of Pittsburgh and West Virginia Pipe Line Co. are Wm. G. Pohl, E. J. McKay, Herbert List, all of 231 La Salle St., Chicago, Ill., and others, with principal office in Charleston; all incorporators are connected with H. M. Byllesby & Co., Chicago, Ill.; contract work will be done by or through Byllesby Engineering and Management Corp., Chicago; company plans constructing gas line between Kentucky fields, southern West Virginia and Pennsylvania; has several thousand acres of oil and gas lands in Kentucky and West Virginia.*

Ice and Cold-Storage Plants

Ark., Gould—See Electric Light and Power Plant.

Fla., Jasper—Jasper Ice and Cold Storage Co., M. M. Gay, Pres., plans installing 10-ton capacity plant, award contract about Jan. 1, 1927, install \$15,000 equipment, including new compressor and tanks. (See Machinery Wanted—Compressor; Ice Tank; Pumps; Cans; Condensers, Colls, etc.)*

Fla., Miami—See Miscellaneous Enterprises.

Fla., Punta Gorda—Florida Power and Light Co., 31 Civic Bldg., Miami, reported

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erect \$200,000 ice plant; begin construction about Jan. 1, 1927.

Ga., Macon—Sawyer Coal & Ice Co., Mulberry and Sixth Sts., has permit for \$17,000 addition to ice plant; R. H. Smalling & Sons, Builders, 2515 Second St.

Ky., Cloverport—The Kentucky-Tennessee Light & Power Co., F. S. McDaniel, Dist. Mgr., will enlarge ice plant; install additional machinery, increasing output.

La., New Orleans—Orleans Ice Manufacturing Co., 1207 Chartres St., reported will erect 1-story garage and office building at Chartres and Governor Nicholls Sts.; reinforced concrete, brick and steel, concrete foundation, concrete floor, steel trusses, slate roof, copper gutters, steel sash; E. M. Reynolds, Archt., 822 Perdido St., receiving bids.

Md., Baltimore—American Ice Co., Calvert Bldg., has permit for \$10,000 building, 107 Cross St.; 1 story, 29x59 ft., brick; C. L. Weir, Archt.; construction by owner.*

Miss., Flora—Flora Ice, Coal & Lumber Co., capital \$25,000, incorporated; Hal J. Jones, J. E. Wilson.

Mo., Kansas City—American Ice Co., Harry L. Burk, V. Pres. and Gen. Mgr., reported has permit for third unit of plant at 205 W. Seventy-first St.

Tex., Cisco—West Texas Utilities Co., P. W. Campbell, Mgr., will erect \$8000 ice station addition; has 75x100-ft. site; contract not let; will probably start construction about March, 1927.*

Tex., Fort Worth—Lone Star Ice Co., N. Calhoun and Twenty-first St., reported, will erect new plant at Rosen Heights, Loving Ave. and Twenty-fifth St.; capacity 40 tons; estimated cost \$80,000.

Tex., Quitaque—Twin City Ice and Electric Co., F. Taylor, Pres., has building containing 152½ kv-a electric equipment and 10 ton capacity ice plant; installed one 25 h.p., one 60 h.p. and one 120 h.p. engines; 144 ice cans and tank, etc.; equipment furnished by Fairbanks, Morse & Co., 1713 N. Market St., Dallas; Baker Ice Machinery Co.*

Iron and Steel Plants

W. Va., Weirton—Weirton Steel Co., F. A. Hanlin, Asst. to the Pres., advises: "The new river dock started operating Nov. 1 and new battery of 49 coke ovens also started at same time; the new strip mill will be placed in operation next Spring and shortly after that we expect to start on construction of the tube mill."

Land Developments

Ga., Brunswick—Brunswick and Terminal Railway Securities Co., Geo. W. Steele, Pres., will develop 360 acres for subdivision; city will grade streets.

Ga., Savannah—Julius M. Hirsch acquired tract on Liberty St.; will develop.

Ky., Covington—John T. Murphy reported acquired 25,000 acres in Perry County.

Ky., Newport—Ben A. Adams Co., Fifth and Madison Sts., and Chester A. Silva, 606 Monmouth St., both Cincinnati, O., reported acquired 33 acres for development of subdivision.

La., New Orleans—City voted bonds for park extensions. See Financial News—Bond Issues Proposed.*

La., New Orleans—Sunnyside Realty Co., capital \$15,000, incorporated; Walter C. Keenan, L. & L. G. Bldg.

La., Shreveport—City plans developing 4-acre tract at Greenwood and Mansfield Roads for tourist park. Address Mayor Thomas.

Md., Baltimore—Frank Novak Realty Co., Gunther Bldg., will develop 25 acre subdivision on Belair Rd. and Herring Run.

Miss., Greenwood—Country Club Realty Co., J. R. Bingham, will develop 280 acres for subdivision.

Miss., Picayune—Pearl River Highlands Co., Wm. J. Krome, Pres., Homestead, has 50,000 acres in Pearl River County, 500 acres now under cultivation in Satsuma oranges; will develop other tracts into orchards and dairy-farm lands.

Mo., Kansas City—Lincoln Realty Co., incorporated; John W. Hudson, 201 W. Armour St.

Mo., Kansas City—Frank Hodges of Olathe, Kan., reported acquired 32 acres wooded land; develop subdivision; install water, lights and streets.

Mo., Kansas City—910-12 Ward Parkway Building Corp., capital \$40,000, incorporated; H. H. Gartside, 402 Continental Bldg.

Mo., St. Louis—Esther Investment Co.,

capital \$30,000, incorporated; E. N. Havens, 2020 McCausland St.

Mo., St. Louis—Dunboyne Realty Co., capital \$15,000, incorporated; Geo. L. Schaberg, 5915-A Maple St.

N. C., Asheville—C. P. Edwards Co., capital \$50,000, incorporated; C. P. Edwards, Medical Bldg.

N. C., Asheville—Hippodrome Land Co., capital \$50,000, incorporated; L. W. Cherry, American Nat'l Bank Bldg.

N. C., Greenville—Eastern Land and Loan Co., capital \$20,000, incorporated; L. W. Blow, W. J. Jenkins.

N. C., Pinehurst—Donald J. Ross reported to develop two additional golf courses at Knollwood.

N. C., Raleigh—Manteo Development Co., capital \$100,000, incorporated; B. H. Griffin, Sir Walter Hotel.

N. C., Raleigh—Lundy & Clarke, capital \$100,000, incorporated; Clarence E. Lundy, 4 E. Martin St.

N. C., Winston-Salem—Smithdeal Realty & Insurance Co., C. C. Smithdeal, Sec., 221 W. Fifth Ave., is developing subdivision; Thomas W. Sears, 1600 Walnut St., Philadelphia, Pa., is in charge of general lay out and planning.

Okla., Blackwell—Charles Lancer acquired 160 acres; will subdivide into 5-acre tracts.

S. C., Cope—Three Mile Farm Co., incorporated; A. E. Jernigan, J. H. Jernigan.

Tenn., Knoxville—Interstate Building Corp., 200 General Bldg., Harry H. Cowl, Sec., is developing 80-acre subdivision; construct streets and install water systems, electricity, telephones; McCalla Engineering Co., 709 Market St., Knoxville, temporary engineer.*

Tenn., Shelbyville—Biggersville Development Co., capital \$20,000, incorporated; J. M. Williamson, J. H. Dych.

Tex., Amarillo—Dentex Realty Co., capital \$25,000, incorporated; L. A. Keck, 405 Harrison St.

Tex., Dallas—Bermuda Pecan Orchards, Inc., chartered; J. L. Clarkson, 4202 Cole St.

Tex., Dallas—Terminal Industrial Land Co. increased capital, \$75,000 to \$275,000.

Tex., Dallas—C. W. Snider, Wichita Falls, and J. Fred Smith, 3501 University Blvd., Dallas, will develop 30 acre site on Hillcrest and Daniel Aves., construct streets, etc.

Tex., Houston—Houston North Shore Realty Co., Harry K. Johnson, Pres., Stewart Bldg., reported developing 8000 acres between Baytown and Greens Bayou, for subdivision.

Tex., Houston—Dr. L. Sandel, La Porte, acquired 14 acres along bay near Sylvan Beach; will develop.

Tex., Houston—Ship Channel Trust Co., J. C. Wheeler, Sec., Gulf Bldg., will develop 100 acre subdivision; install shelled streets, electric lights, phones, etc.*

Tex., San Antonio—Alvin B. Giles, Hollywood, Cal., and New York City, reported acquired 1200 acres outside city limits of Rio Grande City, establishing Rio Grande Farms Co.; develop 350 acres for citrus fruits; Lawrence Brooks, Pres., Rio Grande City.

Tex., San Benito—C. E. DeFreest and C. R. Tyrrell, Brady Bldg., San Antonio, reported acquired 1700 acres in Cameron County; will develop for colonization.

Tex., Weslaco—Boca Chica Beach, Inc., Ewing D. Clark, Sec., will develop 100 acres in Cameron County for beach resort; construct seawall, bath house, grade, build streets, erect water system; E. M. Card, Engr. and Landscape Archt., McAllen. (See Machinery Wanted—Dredge; Road Machinery; Tractor; Trucks.)

Va., Hopewell—City, D. T. Gornto, Mayor, plans acquiring tract for cemetery development.

Va., Virginia Beach—Virginia Beach Home Building Co., capital \$50,000, incorporated; W. R. Davis, E. L. Minor.

Va., Virginia Beach—Martha Washington Holding Co., capital \$25,000, incorporated; A. Johnston Ackiss, Bank of Commerce Bldg., Norfolk.

Lumber Enterprises

Georgia—See Miscellaneous Enterprises.

Miss., Biloxi—Back Bay Lumber Co. incorporated; C. E. Kendall, Ridgely, Tenn.; Jerry Oliver, Gautier, Miss.

Miss., Hattiesburg—Home Lumber & Supply Co., capital \$25,000, incorporated; C. F. and H. W. Pitman, 310 Tenth Ave.

Metal-Working Plants

Mo., St. Louis—Sheet Metal Products—Wm. A. Tipton, Inc., capital \$20,000, chartered; Clarence C. Hall, 10 N. Kingshighway.

Mining

Ala., Cherokee—Colbert Lime Rock Asphalt Co., R. P. Jones, Pres., Vicksburg, Miss., increased capital, \$150,000 to \$500,000; reported acquired 1800 acres of lime rock asphalt land; plans increasing production at quarry from 4 to 20 cars daily; plant is being electrified; Alabama Power Co. has constructed transmission lines to supply power.

Florida—Rock—S. W. Dolan, J. W. Riley of Miami and associates reported acquired 1000 acres on the Hillsborough River, in Pasco County; will mine rock deposits.

Miscellaneous Construction

Ala., Birmingham—Incinerators—City Comm. let contract to C. O. Bartlett & Snow Co., 6200 Harvard St., Cleveland, Ohio, at \$352,800 for construction of three garbage incinerators; plants to be built are central plant of 180 tons daily capacity at Powell Ave. and Thirty-fifth St.; 90-ton capacity plant at Avenue W and Village Creek, Ensley, and 60-ton capacity plant at Twenty-third St. and Twenty-fourth Ave.*

Ala., Birmingham—Swimming Pool—See Miscellaneous Enterprises.

Fla., Daytona—City Manager Walter A. Richards advises as follows regarding proposed construction of approaches to ocean beach: "Plans and specifications not completed; total work contemplated about \$10,000, probably to be done by city forces."

Fla., Daytona Beach—Bulkhead—Max Slepman reported has permit to construct bulkhead, dredge and fill in Halifax River.

La., New Orleans—Swimming Pool—Dr. Wm. Scheppergrell, Pres. Park Board, has plans for proposed Audubon Park Natatorium; building to be 250x175 ft. and pools 225x75 ft.; specifications now being prepared and bids will soon be asked; Sam Stone, Jr., & Co., Archts., Masonic Temple Bldg.

La., New Orleans—Incinerators—City has \$1,200,000 available for construction of modern garbage collection and disposal plant; Arthur J. O'Keefe, Mayor. See Financial News—Bond Issues Proposed.*

Tex., Galveston—Wharf and Pier—Galveston Wharf Co., E. M. Gossrau, Owner and Mgr., 2324 Avenue B, has plans for reinforced concrete pier and warehouse at Pier No. 9; estimated cost \$450,000; R. M. Sias, Engr., 2324 Avenue B.*

Va., City Point, Sta. Hopewell—Norfolk Sand and Gravel Co., 424 W. York St., Norfolk, let contract to Swain Construction Co. of Hopewell for construction of wharf on James River.*

Miscellaneous Enterprises

Ala., Birmingham—Amusement Park—The Alabama State Fair Assn. interested in converting Alabama State fairgrounds into a \$350,000 amusement park; has contract with Maj. F. C. Rhodes, operator of the Glad-Way at the Sesqui-Centennial Exposition at Philadelphia, Pa., for moving and installing devices; also erect dance pavilion, 185x350 ft., swimming pool, etc.; the Outdoor Amusement Co., Inc., with Maj. F. C. Rhodes, Pres., and James L. Dent, Sec., will be incorporated as a subsidiary to the Alabama State Fair Assn.

Ark., Camden—Luther Ellison, Sec., Chamber of Commerce, wires regarding the construction of plant by International Paper Co. of 100 E. Forty-second St., New York City: "Will begin construction in January of \$5,000,000 plant to manufacture Kraft paper, named Arkansas Fiber and Paper Co., four units mill, daily output about 200 tons paper; electric power requirements furnished by the Arkansas Light and Power Co.; plant to be completed Nov., 1927."

Ark., Texarkana—Traffic Lights—City let contract to Southwestern Gas and Electric Co. for installation of 6 stop and go electric street traffic signals; H. H. Brashear, Mayor.

D. C., Washington—Nicksal Construction Co., Inc., capital \$10,000; Harry Salus, 1448 P St. N. W., Washington; Harry Nichter, Takoma Park, Md.

Fla., Daytona Beach—Daytona Beach News-Journal formed by consolidation of Daytona Beach Journal and Daytona Beach News with T. E. Fitzgerald as Publisher; Eugene C. Pulliam, Editor; present plant of the News will be used for publication, and will probably be enlarged.

Fla., Miami—The Cudahy Packing Co., 314 S. Twenty-first St., St. Louis, Mo., reported, establish wholesale market and refrigerating plant; leased 100x150-ft. site at N. E. Twenty-third St., erect 1-story 96x108-ft. building, reinforced concrete and hollow tile; estimated cost \$40,000; will equip building with cold-

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storage machinery, costing \$50,000; construction to begin immediately.

Fla., Sarasota—Sarasota Canners Assn., J. F. Keeley, Pres., 130 N. Pineapple Ave., will erect new plant, 60x100-ft., frame with corrugated walls, cement floors, install equipment for canning fruits, vegetables, fish, preserving, etc.; daily output 100 to 150 cases. (See Machinery Wanted—Canning Machinery, etc.)

Georgia—The Timber Products Co., Alex. K. Sessoms, Pres., Cogdell, Ga., reported acquired the turpentine plant on the old Freeman Walker plantation, in Clinch County; installing French model distillation plant.*

Ga., Atlanta—Southwestern Engraving Co., 206 W. 11th St., Fort Worth, Tex., reported leased space in Cooper Bldg., Luckie and Spring Sts.; establish modern plant.

Ga., Columbus—T. G. Strange and S. W. Beppner of Louisville, Ky., reported acquired the Columbus Packing Co.; contemplated expending \$10,000 on improvements, etc.; change name to The Provision Co.

Ga., Griffin—Dyes. See Textile Mills.

Ga., Savannah—Merchandise—W. H. Cain & Co., Merchants and Miners Trans. Terminals, incorporated; William Cain, Thomas R. Cain.

Ga., Savannah—Nugent's Bakery, Thomas Nugent, Bryan St., reported acquired additional property on Bryan and Montgomery Sts.; later use for warehouse and garages.

Louisiana—Louisiana Shell Island Products Co., Inc., 1221-23 New Orleans Bank Bldg., New Orleans, reported has plans for construction of 1-story, steel and frame factory building in Plaquemine Parish, estimated cost \$35,000; receives bids about Jan. 1, 1927. Company advises: "We have placed our orders for all machinery that we need, also arranged for construction of building."

La., Avery Island—Nursery—Jungle Gardens, Inc., capital \$1,300,000; E. A. McIlheny, Pres.

La., Baton Rouge—Hundred Oaks Dairy, Inc., capital \$50,000, chartered; Samuel I. Raymond, 442 N. Boulevard.

La., New Orleans—Washington Lumber and Demolishing Co., Inc., chartered; Geo. R. Larrien, Canal-Commercial Bldg.

La., New Orleans—Southern Fur Co., Inc., capital \$50,000, chartered; Wm. A. Walsingham, 521 Decatur St.

La., Opelousas—Farmers Seed Agency, Inc., chartered; Albert Tate of Opelousas; Geo. Callet of White Castle.

Md., Baltimore—Merchandise—The Ledor Manufacturing Co., 201 W. Franklin St., incorporated; Charles B. Hoffman, Robert France.

Md., Baltimore—National Outdoor Advertising Co., 1038 Hillen St., capital \$100,000, incorporated; James A. Cahill, Charles L. Kohlstead.

Md., Baltimore—Daniel Miller Co., James M. Easter, Pres., 26 Hopkins Pl., acquired the stock, fixtures, etc., of the Johnson Boyd & Co.

Md., Baltimore—The Mont-Alto Apartment Co., 2114 Allendale Rd., incorporated; Robert J. McNamara, Howard D. Bennett.

Md., Salisbury—Meat Products—Webb Packing Co., T. M. Webb, Pres., reported acquired 2½ acre site on the Truitt Road; will erect 2-story plant, cement block construction, containing about 16,000 ft. floor space.*

Miss., Greenwood—Ne-Hi Bottling Co., capital \$25,000, incorporated; C. W. Busby, C. C. Whittington.

Miss., Gulfport—Hotel Rayner, Inc., capital \$50,000, chartered; Charles H. Kaplan, Leo Sorock.

Miss., Carnes—The Carnes Mercantile Co., capital \$10,000, incorporated; L. F. Batson of Carnes; W. C. Batson of Wiggins.

Miss., McComb—The McComb Semi-Weekly Journal, H. Rey Bonney, Publisher, reported acquired brick building adjoining present plant; will remodel.

Miss., Starkville—The Borden Southern Co., Manufacturing Dept., Construction and Equipment Section, W. H. Howard, Supt., advises: "We propose to erect small addition to our Starkville plant; all details have been taken care of."

Mo., Carthage—C. Soto and Virgil Humphrey, both of the C. Soto Cigar Co. of St. Louis, reported purchased site near Grant and Chestnut Sts.; erect 2-story cigar factory, brick and tile construction; operated under name of Spanish-American Cigar Co.

Mo., Dexter—Statesman Publishing Co., capital \$15,000 incorporated; Ed. P. Crowe, Dale Blankenship.

Mo., Drexel—The Superior Hatchery, H. H. McGrew, Pres., Box 152, has new fireproof buildings, 52x32 ft., 30x30 ft., and two 8x12 ft.; install \$6000 equipment, incubation units 36,000 egg capacity; furnished by Queen Incubator Co., Lincoln, Neb. (See Machinery Wanted—Brooders, etc.)*

Mo., Kansas City—Machinery—Manhattan Supply Co., incorporated; C. F. Alexander, 3515 Wyandotte St.

Mo., Kansas City—W. C. Hill construction Co., capital \$20,000, incorporated; W. C. Hill, 3126 Forest Ave.

Mo., Kansas City—Coal Saving Carburetor & Smoke Abater Co., J. C. Strock, Pres., 501 Grand Avenue Temple, has assembling plant at 1416 Oak St.; equipment installed.*

Mo., Kansas City—Vending Machines—Old World Parfums Co., capital \$50,000, incorporated; R. S. McClintock, 1212 Stratford Rd.

Mo., Kirkwood—Winter Floral Co., capital \$25,000, incorporated; Wilhelm Winter, 810 Taylor St.

Mo., St. Louis—Huntington Apartment Hotel Co., capital \$100,000, incorporated; Geo. L. Schaberg, 5915a Maple St.

Mo., St. Louis—Hilda Hat Manufacturing Co., 1416 Washington Ave., capital \$20,000, incorporated; Frank Spielberg, Geo. J. Peterman.

Mo., St. Louis—Art Furniture Co., capital \$10,000, incorporated; Walter Fabianski, 4422 S. Grand St.

Mo., St. Louis—Zig-Zag Drug Shops, capital \$100,000, incorporated; Morrison J. Miller, 6008a Westminster St.

Mo., St. Louis—S. A. Robertson Construction Co., capital \$10,000, incorporated; S. A. Robertson, 910 Forest St.

N. C., Asheville—Blue Ridge Publishing Co., capital \$50,000, incorporated; Geo. M. Pritchard, Medical Bldg.

N. C., Asheville—Laundry—Abbott-Knight, Inc., T. K. Knight, Sec., 215 Coxe St., completing \$30,000 plant, 3 story, 50x100 ft., brick and tile; install \$30,000 equipment; J. H. Fisher, Contr., 78 Patton Ave.; equipment furnished by American Laundry Machinery Co.*

N. C., Burlington—Hayes Construction Co., capital \$25,000, incorporated; J. E. Black, F. A. Hayes.

N. C., Charlotte—The Mecklenburg Times, published in Charlotte, and the North Mecklenburg News, published in Huntersville, consolidated, to be known as Mecklenburg Times; B. Arp Lowrance will be publisher; Legette Blythe, Editor.

N. C., Glendon—United Tale and Crayon Co., J. S. Holland, Sec.-Treas., remodeling present plant; will install machinery to make tale and soapstone pencils. (See Machinery Wanted—Tale Machinery; Soapstone Pencil Machinery, etc.; Piping; Railing; Bags; Boxes.)*

N. C., Greensboro—Cleaning and Laundry—Justice, Inc., capital \$100,000, chartered; F. C. Boyles, 614 W. Market St.; C. N. Justice.

N. C., Greensboro—Cunningham Springless Shade Co., W. A. Anderson, Sales Mgr., N. Spring St., advises the following regarding erection of plant addition: "Our proposed addition still in the development stage and nothing to be done before spring."*

N. C., Greensboro—Publishers, etc.—Methodist Board of Publication, 429 W. Gaston St., will erect \$70,000 plant, 2 story, 53x107 ft., stone and brick, composition and cement floor, composition roof; open bids about Feb. 15; C. C. Hartman, Constr. Engr., Jefferson Bldg.*

N. C., Hendersonville—The Hendersonville New Way Laundry, capital \$10,000, incorporated; R. O. Buckner, Ernest Beck, Hebron Rd.

N. C., Winston-Salem—R. J. Reynolds Realty Co., Reynolda, has permit for construction of addition to building at 235 N. Church St., to be occupied by the Morgan-Hoffman Cleaning System, 3 E. Third St.; Frank L. Bjum & Co., Contrs., 110 E. Second St.; Hall Crews, Archt., 418 Arcadia Ave.

Okla., Ada—American Theater Co. of Ada, capital \$10,000, incorporated; F. G. Roberts, W. A. Delaney, Jr.

Okla., Blanchard—The Chickasaw Elevator Co., capital \$30,000, incorporated; T. J. Laws, Frank H. Koln.

Okla., Frederick—Blue Front Grocery Co., capital \$25,000, incorporated; J. R. McConaughy, C. B. Booton.

Okla., Geary—The Swan Hatchery, capital \$25,000, incorporated; John H. Hugh, J. E. Young.

Okla., Henryetta—Owl Drug Co., capital \$10,000, incorporated; I. W. Bellinger, M. T. Bowman.

Okla., Hobart—The Kiowa County Community Hatchery, capital \$10,000, incorporated; P. O. Wright, J. G. Niles.

Okla., Tulsa—Mid-Continent Electric Co., capital \$10,000, incorporated; R. E. Day, 1728 E. 14th Place.

Okla., Tulsa—Aerial Cone Manufacturing Co., capital \$25,000, incorporated; Edward Austin, 1212 S. Quimby St.

Okla., Tulsa—Fruit Products Corp., capital \$25,000, chartered; Edwin N. Fischer, 221 E. 21st St.

S. C., Orangeburg—Merchandise—The Orangeburg Paper Co. incorporated; A. J. Harley, N. A. Harley.

Tenn., Dyersburg—The Industrial Addition Assn., capital \$10,000, chartered; John N. Parker, John M. Tarrant.

Tenn., Fayetteville—The Borden Southern Co., main office 350 Madison Ave., New York City, let contract to the H. K. Ferguson Co., Engrs. and Builders, 4900 Euclid Ave., Cleveland, Ohio, for construction of butter factory, 1 story, 80x240 ft. and one portion to be 2 story, 30x45 ft.; structural steel and timber frame; wood roof; concrete floor and foundation, brick walls, steel sash; plumbing and roof drainage included in general contract; heating, lighting and sprinklers will be let direct by owner under separate contract; plans and specifications by the owner, supplemented by working drawings by the H. K. Ferguson Co.; W. H. Howard, Supt. of Manufacturing Dept.*

Tenn., Knoxville—Swan Brothers, Inc., 810 N. Central St., reported acquired site on Magnolia Ave.; erect new plant.

Tenn., Knoxville—C. and S. Laundry Co., 33 Emory Park, Joe A. Connor and Sam Sanders, Proprs., reported will erect new laundry building cor. Magnolia Ave. and Jassamine St.; estimated cost \$10,000.

Tenn., Knoxville—Interstate Building Corp., capital \$10,000, chartered; Harry H. Cowl, John J. Williams.

Tenn., Memphis—Cleaning, etc.—Kraus & Co., 726 Madison Ave., received low bid from Ferguson Construction Co., Graham Bldg., for plant addition; 1 story, 16x61 ft., reinforced concrete and brick, tar and gravel roof; Jones & Furbringer, Archts., Porter Bldg.

Tenn., Memphis—The Commercial Publishing Co. will expend approximately \$750,000 within next twelve months for new buildings, presses and other equipment, all to care for the publication of The Commercial Appeal and Memphis Evening Appeal.*

Tenn., Memphis—Shock Absorbers—J. Swayne Wilson, Inc., capital \$10,000, chartered; J. Swayne Wilson, L. D. Bates.

Tenn., Memphis—Allprest Laundry, Inc., capital \$125,000, chartered; Albert Hattendorf, 219 Hawthorne Rd.

Tex., Alice—R. C. Bell, 1108 Baldwin St., Fort Smith, Ark., reported purchased site; will erect 2-story, concrete or tile building; establish shirt factory; install 175 power machines.

Tex., Amarillo—Ainsworth Drug Co., capital \$150,000, incorporated; Neal Ainsworth, L. E. Patterson.

Tex., Atlanta—The Atlanta Warehouse Co., capital \$10,000, incorporated; H. V. Caver, H. H. Price.

Tex., Amarillo—Panhandle Laboratories incorporated; F. B. Porter, N. C. Hammer.

Tex., Beaumont—Hamshire Bonded Warehouse Co., incorporated; Oliver Todd, 1407 San Jacinto Life Bldg.

Tex., Brownsville—Guarantee Electric Co., Inc., chartered; Geo. Martin, G. C. Ellis.

Tex., Corsicana—Natatorium, Inc., increasing capital, \$20,000 to \$25,000.

Tex., Dallas—C. P. Mann & Co., 200-03 American Nat'l Ins. Bldg., Galveston, offering 7½% cumulative preferred stock of the Schepps-Kleber Baking Co.*

Tex., Dallas—Securbo Lock, Bolt and Nut Co., incorporated; W. Nell Johnson, 324 Beverly Drive.

Tex., Dallas—Merchandise—Norfolk's, Inc., capital \$15,000, chartered; S. K. Norfolk, 3735 Colonial St.

Tex., Dallas—Dresses, etc.—Marcy-Lee Manufacturing Co. increased capital, \$30,000 to \$50,000.

Tex., Dallas—Tenth Street Pharmacy, capital \$10,000, incorporated; I. N. Colclough, E. L. Clark.

Tex., Dickinson—M. G. Clymer, Pres., Best-Clymer Co., 425 W. Davis St., St. Louis, Mo., reported contemplates establishing canneries in Dickinson, Webster and Alvin; specializing in figs.

Tex., Eastland—Eastland Mineral Water Co., K. C. Ferguson, M. D., Pres., 204 Ex-

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change Bank Bldg., will erect bath house and clinic building, brick or native rock construction, cement floors, tile roof; cost first unit about \$10,000; install \$5000 equipment, including bath tubs, heating plant, vapor baths, electric light cabinets, bottling equipment, etc. (See Machinery Wanted—Bottling Equipment; Air Cooling Equipment; Electric Light Cabinets; Heating Plant; Vapor Baths; Bath Tubs; Concentrators.)*

Tex., El Paso—El Paso Building and Material Co., 2910 Durazo St., increased capital, \$15,000 to \$50,000.

Tex., Galveston—Moon Brothers Transfer, Inc., capital \$10,000, chartered; W. P. Moon, Jr., 1411 38th St.

Tex., Galveston—Southern Beverage Co., 3312 F St., let contract to Max Roitsch for alterations and repairs to present building; Stowe & Stowe, Archts., 311½ Twenty-second St.

Tex., Houston—Superior Hotel Supply Co., Inc., chartered; James Muller, 904 Rosalie St.

Tex., Mercedes—Valley Zerozone Co. incorporated; R. S. Tolson, C. G. Thornton.

Tex., Nacogdoches—Warren D. Ambrose interested in proposed establishment egg hatchery, capacity 12,000 eggs; F. O. Montague, County Agent.

Tex., San Antonio—The Steffler Baking Co., 1029 Garden St., will erect plant addition; 1 story, brick and concrete; install additional equipment; L. Harrington & Co., Archts.-Engrs., Builders Exchange Bldg.

Tex., San Benito—Thomas-Morris Produce Co., Inc., capital \$30,000, chartered; M. W. Morris, W. E. Thomas.

Tex., San Saba—American Fertilizer and Chemical Works, Thos. F. Hawkins, Pres., Georgetown, will erect \$30,000 plant, 69x180 ft., stone and sheet iron, lower floor concrete, metal roof; install \$20,000 equipment; manufacture fertilizer, lime, etc., daily output 50 tons; begin construction about Jan. 1, 1927; contract not let. (See Machinery Wanted—Quarry Equipment; Fertilizer Plant Equipment.)*

Tex., Sequin—Guadalupe Creamery increased capital, \$25,000 to \$75,000.

Tex., Waco—Van Eman Construction Co., capital \$50,000, incorporated; C. H. Van Eman, L. R. Whiteley.

Tex., Waco—Merchandise—W. E. Crawford Co., capital \$100,000, incorporated; W. F. Crawford, 2801 Herring Ave.

Va., Dillwyn—Emmet D. Gregory will establish new weekly paper and job printing office, install presses, type, etc. (See Machinery Wanted—Printing Plant Equipment.)

Va., Portsmouth—Gregory Laboratories, Inc., V. C. Randall, Pres., increased capital, \$10,000 to \$50,000; changed location of office from Norfolk.

Va., Richmond—Food Products—Spinach Products Co., Inc., chartered; Thomas B. Gay, Va. Rwy. & Power Bldg., in charge.

W. Va., Charleston—State Board of Control received low bid from the Wheeling News Lithograph Co., Wheeling, for printing the code of W. Virginia in pamphlet form.

W. Va., Dunbar—Fletcher Enamel Co. reported will erect plant addition; use for the storage of packing materials; fireproof construction; new structure will give more space available for manufacturing purposes and installation of additional equipment; Company advises: "Plans will not be completed before March 1, 1927."

W. Va., Huntington—The Compressed Gas Co., main office Wheeling, reported contemplates installing additional machinery, increasing output.

W. Va., Weston—C. A. Borchelt Co. let contract to the Hope Lumber Co. at \$11,000 for material to be used in construction of factory; specialize in cutting and decorating glassware.*

Motor Bus Lines and Terminals

Md., Salisbury—The Eastern Shore Transit Co. granted permit to establish passenger bus line between Virginia State line and Salisbury via Pocomoke City, Coston, Kings Creek, Princess Anne, Loretta, Eden and Fruitland.*

Motor Cars, Garages, Filling Stations

Ala., Birmingham—Eighty-one Tire Co., 600 S. Twenty-first St., will erect filling station and store, S. Highland Ave. and Beech St.; 2 story, 50x100x50 ft., brick and hollow tile; estimated cost \$35,000; construction by day labor.

Ala., Birmingham—C. A. Hatcher of the Drennen Motor Car Co., 401 S. 20th St., leased

site cor. Avenue G and Twentieth St., 60x100 ft.; will erect building; plans not completed.

Fla., Jacksonville—John G. Snell, 1728 Pearl St., will remodel the Wesa Bldg., on Main St., for garage and filling station.

Fla., Tampa—United Motors Co., Jamie Pendas, Pres., 1702 Franklin St., let contract to Friend & Bournier for construction of \$84,000 garage and show rooms at 2301 Tampa St.; concrete and steel, fireproof; Fred J. James, Archt., 706 Franklin St., Tampa.*

Ga., Savannah—Garage, etc.—See Miscellaneous Enterprises.

La., New Orleans—See Ice and Cold Storage Plants.

Md., Baltimore—Sherwood Bros., Inc., Continental Bldg., acquired site corner Monroe and Pressman Sts., 144x90 ft.; will erect service station.

Md., Baltimore—Maryland Truck Equipment Corp., 507 Old Town National Bank Bldg., incorporated; Alpheus B. Cochran, Wm. A. Randall.

Md., Baltimore—Automobile Accessories—The G. H. Manufacturing Co., Inc., 9 East Mt. Royal Ave., capital \$200,000, incorporated; Geo. A. Harwood, S. Lee George.

Md., Baltimore—The Auto Wrecking & Parts Co., 920-22 E. Lexington St., incorporated; Moses Hibernian, Jacob Briskman.

Md., Baltimore—Richwood Development Co., 402 St. Paul Pl., has permit for construction of sixty-six 1-story brick garages, rear of 520-620 Radnor Ave.; slag roof, estimated cost \$12,000; H. Kirk, Archt.; construction by owner.

Miss., Brookhaven—Louisiana Oil Corp., known as "Loreco" Corp., erect filling station cor. Chickasaw and S. First St.; construction begun.

Miss., Corinth—Gulf Refining Co. erect filling station cor. Taylor and Foote Sts.; construction begun.

Miss., McLain—Dearman Motor Co., capital \$10,000, incorporated; Mattie P. and W. F. Dearman.

Mo., Jackson—Compas Motor Co., capital \$90,000, incorporated; Frank Compas, C. C. Williams.

Mo., Jefferson City—Brookside Motor Service Co. incorporated; J. L. Casmer, T. L. Kiles.

Mo., Kansas City—D and W Garage Co. incorporated; A. E. Whitney, 5624 Cherry St.

Mo., Poplar Bluff—Barron Garage Co., capital \$12,000, incorporated; David E. Black, Wm. N. Barron.

N. C., Asheville—Haywood Service Station, Inc., capital \$100,000, chartered; Ruffner Campbell, Jackson Bldg.

N. C., Asheville—Wells Motor Co., capital \$100,000, incorporated; J. S. Wells, J. Frank Wells.

N. C., Greensboro—Thomas G. Hunt, Inc., East Sycamore and Forbis St., acquired property on Wendover St.; will remodel for automobile salesroom.

N. C., Shelby—Cleveland Oil Co., capital \$100,000, incorporated; J. Flem Johnson, Gastonia; S. A. Washburn, Shelby.

N. C., Winston-Salem—Auto Parts Co., capital \$50,000, incorporated; I. H. Roberts, W. C. Tise.

Okla., McAlester—Childers Motor Co. let contract to W. E. Vorhes for \$15,000 garage building, 1-story, 60x145 ft., brick; J. J. Walsh, Archt.*

Okla., Oklahoma City—A. Dunn, 620 W. Second St., let contract to A. L. D. Whorton for \$15,000 garage building, 1-story, 100x130 ft., brick.

Okla., Tulsa—F. L. Townsend, 1434 S. Denver St., has permit for \$10,000 public garage at 510 S. Denver St., 50x140 ft., fireproof, brick construction.

Tenn., Memphis—J. B. Hanson Inc., 511 N. Dunlap St., has contract at \$100,000 for building cor. Union Ave. and Pasadena Place, work to begin immediately; to be occupied by the Studebaker Sales Co., 259 Monroe St., and the Memphis Operatives of the Studebaker Corp. of America; buildings designed by the Studebaker Engineers at South Bend, Ind., erected under supervision of E. L. Harrison, Archt., Fidelity Bank Bldg.

Tenn., Nashville—Randolph Caldwell Motor Co., capital \$50,000, incorporated; H. P. Caldwell, Caldwell Lane.

Tex., Atlanta—East Texas Motor Co. incorporated; A. O. Brabham, H. E. Northen.

Tex., Atlanta—All-Day Motor Co., capital \$12,000, incorporated; R. S. Allday, L. F. Allday, Jr.

Tex., Brownsville—Brown White, Owner of

Brown White Garage, let contract to W. A. Velton, Brownsville, at \$13,195 for 1-story, 50x120-ft. building, hollow tile and stucco; leased to Stevenson Motor Sales Co., Inc.*

Tex., Dallas—Pacific Avenue Garage, Inc., capital \$10,000, chartered; Ridgell Keller, 5303 Richard St.

Tex., Fort Worth—James T. Taylor, First Nat'l Bank Bldg., has contract for construction of \$50,000 sales and service station at W. Seventh and Lexington Sts.; 2 story, brick and concrete, fireproof.

Tex., San Antonio—Stutz San Antonio Co., capital \$25,000, incorporated; A. A. Buchanan, 1601 W. Woodlawn St.

Tex., San Antonio—Guarantee Motor Car Co., J. F. Hagan, 702 San Pedro Ave., let contract to Ed. Oeffinger, Builders Exchange Bldg., at \$84,490 for garage building at San Pedro and Poplar St., to Chalkley Bros., 218 E. Romana St., for heating; to J. Monier, 1446 N. Flores St., for plumbing; to Martia Wright, 308 E. Houston St., for refrigeration.*

Tex., Van Horn—Texas Motor Co., capital \$20,000, incorporated; W. J. Dees, J. C. Hunter.

Tex., Weslaco—Knapp Motor Co. contemplates erecting \$50,000 building, 2-story, concrete, brick and stone construction; Ralph H. Cameron, City Natl. Bank Bldg., San Antonio, and R. Newell Waters, Associate Archts.

Railways

La., New Orleans—Missouri Pacific Railroad Co., it is announced, will expend approximately \$150,000 for rehabilitating the New Orleans and Lower Coast Railroad from Algiers to Greatna, La., which it recently acquired. R. M. McWilliams, New Orleans, is executive general agent of the company.

Miss., Meridian—Meridian and Bigbee Railway Co., S. A. Neville of Meridian, Pres., is reported to have let contract to J. A. Perdue & Co. of Pine Bluff, Ark., to build its proposed line from Meridian, Miss., to Myrtlewood, Ala., about 50 mi.; estimated cost \$1,250,000.

Tex., Fritch—Chicago, Rock Island and Pacific Railway is reported surveying to build a line from Fritch to Stinnett, Tex., about 20 mi.; C. A. Morse, Chicago, Ill., is Ch. Engr.

Railway Shops and Terminals

Miss., Lambert—Illinois Central System, A. F. Blass, Ch. Engr., Chicago, Ill., advises: Let contract to Railroad Water and Coal Handling Co., 608 S. Dearborn St., Chicago, for 300-ton coaling station.*

Roads, Streets and Paving

Large sums are being expended for roads, streets and paving in connection with Land Development operations. Details will be found under that classification.

Proposed Construction

Alabama—State Highway Comm., Montgomery, receives bids soon for 2 roads: Bibb County, 18 mi. Centerville to Wilton road, on Selma-Centerville-Montevallo highway; Perry County, 14 mi. Marion to Bibb County line, on Marion-Centerville highway; R. B. Jordan, Engr. in Charge.

Ala., Bessemer—City, J. M. Scott, Clk., plans concrete paving, 1: 2: 3; mix concrete curb, vitrified clay sewer pipes, manholes and inlets on Arlington Ave.; G. D. Cummings, City Engr.

Ala., Birmingham—City Comm. may pave several blocks of streets, connecting Pratt City on one side and North Birmingham on other with Eighteenth St.; A. J. Hawkins, City Engr.

Ala., Birmingham—City Comm. plans expending \$91,640 to pave 6 streets and install sanitary sewer; A. J. Hawkins, City Engr.

Ala., Moulton—State Highway Comm., Montgomery, authorized rock road west from Moulton; W. A. McCalla, State Highway Engr.

Ala., Samson—City, G. D. King, Clk., plans sidewalks on principal streets; R. L. Williamson, Const. Engr., Dothan.

Ala., Selma—Dallas County, W. M. Vaughan, Judge, plans 53 mi. road building, cost \$200,000. See Financial News—Bond Issues Proposed.*

Ark., Fayetteville—City, J. C. Massie, Clk., plans expending about \$36,000 to pave several blocks on Rock St.

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Ark., Fort Smith—State Highway Comm., Little Rock, received low bid from J. A. Burke, 100 N. 18th St., Fort Smith, at \$48,348, for concrete and asphalt road between Fort Smith and Van Buren.

Ark., Hot Springs—City Commrs. plan 5000 sq. yd. paving in Street Improvement Dist. No. 98; Smith & Annen, City Engrs.

Ark., Little Rock—Board of Commrs., Street Improvement Dist. No. 456, receives bids about Dec. 10 to pave W. Twelfth St., High to Battery.

Ark., Springdale—City, G. T. Sullions, Mayor, plans concrete paving, curb and gutter on Emma Ave., Shiloh to Thompson St.

Fla., Fort Myers—City contemplates \$1,250,000 paving; E. N. Stanley, City Engr.

Fla., Fort Pierce—City, Elwyn N. Moses, Clk., plans sidewalks, curbs and gutters north of Avenue C. See Financial News—Bond Issues Proposed.

Fla., Green Cove Springs—Clay County Commrs. plan road building, cost \$90,000. See Financial News—Bond Issues Proposed.

Fla., Jacksonville—Duval County Commrs., Frank Brown, Clk., receives bids Dec. 10 for 1 mi. bituminous surface treatment Mandarin road No. 17, from St. Augustine road southwesterly, and of old Orange Park road, from Cedar Creek Bridge to Butcher Pen Creek; plans from County Engr.*

Fla., Port Tampa—City, J. L. Lancaster, Deputy Clk., plans expending about \$110,880 to pave 8 streets with vitrified brick or cement, including Hanlon, Sparkman.

Fla., Sanford—Chamber of Commerce interested in improving Geneva-Titusville road, State Road No. 44, from Sanford to East Coast, via Geneva and Titusville.

Fla., Vero Beach—City, H. G. Redstone, Clk., receives bids Jan. 6 for 67,890 cu. yd. sub-grading, 121,835 sq. yd. waterbound macadam paving, asphalt surface treatment, 60,939 lin. ft. curb and gutter, 10,083 lin. ft. 10 to 30 in. storm sewers, 93 curb inlets, 12 manholes; plans from Carter & Damerow, Inc., Engrs.

Fla., West Palm Beach—Palm Beach County Commrs., Fred E. Fenno, Clk., receives bids for 2 sections of roads: 740 ft. hard surface, from north abutment of New Hillsborough Canal Bridge to connect with present Dixie Highway; 3500 ft. build and resurface Lake Worth West road, from Military Trail west to Greenacres Post Office; plans from Jake Boyd, County Engr.

Ga., Alma—State Highway Dept., East Point, will let contract soon for grading and drainage structure on road from Alma toward Hazlehurst, Bacon County; 6 or 7 mi. on both Wilson Highway, Augusta to Waycross, and on Beeline Route, Macon to Jacksonville, via Waycross; remaining portion on Beeline route.

Ga., Darien—McIntosh County Commrs. plan surfacing with oyster shells road from Darien to Glynn County, being link in Brunswick-Savannah segment of Atlantic Coastal Highway.

Ga., Thomasville—City, C. C. Pittman, Clk., plans completing paving in residential section.

Ga., Thomasville—Thomas County Commrs. receive bids Dec. 22 for 8½ mi. concrete, Dixie Highway, Route No. 3, above Thomasville.

Ga., Waycross—City Comm., Abram Cook, Mgr., receives bids December 14 for 7 additional blocks of street paving.

Ky., Catlettsburg—Boyd County Commrs. plan improving 11 sections of road in county, including Big Sandy River and Hoods Creek roads. See Financial News—Bond Issues Proposed.

La., Cedar Grove—City receives bids Dec. 27 to pave with reinforced concrete Seventieth St. and Division Ave., standard curbing and gutters, 30 ft. wide; plans from Chas. D. Evans, Consol. Engr., Levy Bldg., Shreveport.

La., Jennings—Louisiana Highway Comm., Baton Rouge, receives bids December 21 to furnish gravel and build 12.185 mi. Jennings-Elton Highway, Jefferson Davis Parish, from point about 6½ mi. north of Jennings to intersection with State Route No. 7, about 1½ mi. east of Elton; plans on file; W. B. Robert, State Highway Engr.

La., Jonesboro—Louisiana Highway Comm., Baton Rouge, receive bids December 16 for 8.644 mi. Chatham-Ruston Highway, Jackson Parish, from Lincoln-Jackson Parish line to Vernon; plans on file; W. B. Robert, State Highway Engr.

La., New Orleans—City, Arthur J. O'Keefe, Mayor, plans doubling paved streets mileage; cost \$1,200,000. See Financial News—Bond Issues Proposed.*

La. Opelousas—City, J. M. Presvott, Clk.,

plans concrete paving, curbing and gutters on Groles St., Main to Cain, and gravel paving from Cain St. to Wallion's Bridge.

Md., Baltimore—City, Howard W. Jackson, Mayor, plans widening 3d St., from Baltimore St. to Philadelphia Rd.; Steuart Purcell, Highways Engr.; B. L. Crozier, Ch. Engr.

Md., Baltimore—Board of Awards received low bid from P. Flanigan & Sons, Inc., Harford Road and Twenty-fifth St., at \$34,890, for 7000 sq. yd. sheet asphalt on concrete base; 2500 lin. ft. curbing; 1300 cu. yd. excavation streets in Cont. No. 390.*

Md., Baltimore—State Roads Comm., 601 Garrett Bldg., received low bid from American Paving & Contracting Co., Montebello Ave. and B. & O. R. R., at \$82,023, for 71 mi. sheet asphalt along Fulton Ave., Edmondson Ave. to Presstman St.*

Miss., Natchez—Board of Aldermen, L. A. Whittington, Mayor, plans additional paving. See Financial News—Bond Issues Proposed.

Miss., Vicksburg—Warren County Board of Supvrs. plans road to Brunswick, cost \$150,000; bridges, cost \$60,000. See Financial News—Bond Issues Proposed.*

Missouri—State Highway Comm., Jefferson City, receives bids Dec. 13 for 63 roads and 18 bridges: Caldwell County, 4.375, 3.669 and 4.077 mi. 30-ft. graded earth, Hamilton, east, 114,027 cu. yd. excavation; Livingston County, 4.104, 2.592 and 2.55 mi. 30-ft. graded earth and 4,001 mi. 18-ft. concrete, Chillicothe west, 104,489 cu. yd. excavation, 40,193 sq. yd. pavement; bridge over creek, two 10x6x34 boxes; bridge over C. B. & Q. R. R., three 24-ft. slabs; 3.751 mi. 9-in. concrete, Chillicothe-Trenton, 8.370 cu. yd. excavation, 19,809 sq. yd. pavement; Grundy County, 4.834 mi. 9-ft. concrete, Chillicothe-Trenton, 25,278 sq. yd. pavement; Linn County, 4.220 mi. sub-soil treatment, Brookfield, east, 16,033 cu. yd. excavation, 2385 cu. yd. pavement; Macon County, 4.383, 4.330, 4.394, 3.593, 4.462, 1.500, 4.683 and 4.575 mi. sub-soil treatment, Macon, east, 55,468 cu. yd. excavation, 23,768 cu. yd. pavement. In Shelby County, 4.963, 4.043, 3.443 and 2.875 mi. sub-soil treatment, Shelby, west, 146,509 cu. yd. excavation, 10,236 cu. yd. pavement; 40-ft. deck girder bridge over creek; Ralls County, 4.991 mi. 18-ft. gravel, Perry-New London road, 49,642 cu. yd. excavation, 6268 cu. yd. pavement; bridge over Dry Fork, two 12x5.9-ft. boxes; Andrain County, 3.930, 4.119 and 3.508 mi. 30-ft. graded earth, Mexico, north, 128,222 cu. yd. excavation; deck girder bridges over Fish Branch, Lick Creek and Davis Fork; Platte County, 2.860 mi. 9-ft. concrete, Missouri River-Platte City, 15,020 sq. yd. pavement; Lafayette County, 1.771 mi. 9-ft. concrete, Waverly-Marshall, 9349 sq. yd. pavement; Saline County, 4.068, 4.369, 4.597 and 3.955 mi. 9-ft. concrete, Waverly-Marshall road, 89,455 sq. yd. pavement; Cass County, 3.141, 4.753 and 4.441 mi. sub-soil treatment, Harrisonville, south, 15,410 cu. yd. pavement.

In Carroll County, 28-ft. bridge on Norborne-west road, over Drainage Ditch, 25-ft. I-beam; Jackson County, widen 39-ft. bridge on Norborne-west road, over creek, 35-ft. I-beam, 7300 lbs. structural steel; Boone County, 3.184, 4.743 and 3.817 mi. 18-ft. concrete, Columbia-Ashland, 59,711 cu. yd. excavation, 123,342 sq. yd. pavement; Franklin County, 2.642 and 2.434 mi. 18-ft. concrete, Washington-U. S. Route 66, 37,860 cu. yd. excavation, 53,373 sq. yd. pavement; Jefferson County, 2.83, 3.691, 3.853, 2.455 and 2.623 mi. 18-ft. concrete, Cedar-Hill-St. Louis and De Soto, east, 2,179 cu. yd. excavation, 136,498 sq. yd. pavement; Washington County, 4.877, 4.873 and 4.863 mi. 18-ft. gravel, Caledonia-north, 18,203 sq. yd. pavement; Ste. Genevieve County, 568 mi. 18-ft. gravel, through St. Marys, 1,467 cu. yd. excavation; bridge over creek, retaining wall and 22x12 box culvert.

In Bates County, 4.890, 3.750, 4.072 and 1.912 mi. sub-soil treatment, Cass County line-Butler, 18,314 cu. yd. chats; Jasper County, 2.161, 4.133, 4.765 mi. graded earth, Carthage-south, and Duenweg-east, 138,635 cu. yd. excavation; 6 bridges over Slough, Center Creek, Fidelity Branch, Grove Creek, slab, deck girder and boxes; Vernon County, 4.083 and 4.115 mi. 30-ft. graded earth, Milo-south, 65,131 cu. yd. excavation; bridges over Dry Branch and Creek, four 20-ft. slabs; Barton County, 4.039 and 4.069 mi. 30-ft. graded earth, Lamar-north, 55,275 cu. yd. excavation; Butler County, 4.454 and 4.034 mi. 9-ft. concrete and 7-ft. gravel, Poplar Bluff-south, 43,961 sq. yd. and 6982 cu. yd. pavement; plans on file; B. H. Pippmeier, Ch. Engr.

Mo., Cape Girardeau—Delta Special Road Dist., Cape Girardeau County, plans improving roads in district and purchasing additional equipment. Address County Commrs. See Financial News—Bond Issues Proposed.

Mo., Joplin—City Comm., plans placing Class G macadam surface on Wall St.

Mo., St. Louis—Board of Public Service receives bids December 21 to improve Lebadie, Greer, Park Lane and Taylor Ave.; rebuild Howard St. and lay roadway on Natural Bridge Ave.; plans on file.

Mo., St. Louis—Board of Public Service plans 33 mi. street and 9.5 mi. alley paving, 100,000 sq. yd. sheet asphalt and asphaltic concrete; 120,000 sq. yd. bituminous asphaltic pavement; 36,000 sq. yd. amiesite; 15,000 sq. yd. brick; 150,000 sq. yd. concrete and 124,000 sq. yd. granite block; cost \$4,125,000. Address Mayor Miller.

Mo., Union—State Highway Dept., Jefferson City, plans graveling 3½ mi. mud-shell road on Highways Nos. 50 and 60, Manchester Rd., Franklin County, from Gray's Summit west; B. H. Piepmeyer, Ch. Engr.

N. C., Durham—City, C. B. Alston, Clk., receives bids soon to grade extensions of Liberty and Elizabeth Sts.

N. C., Durham—City, R. W. Rigsby, Mgr., plans repaving Holloway St.

N. C., Greensboro—City Planning Comm., plans widening Fors St. to Summit Ave., and extending Greene St. over main line Southern R. R. by underpass or overhead bridge; P. C. Painter, City Engr.

N. C., Greensboro—City, E. B. Jeffress, Mayor, plans widening Market St. to 30 ft., from near Dick's laundry to Dean St.

N. C., Raleigh—City Commrs. plan paving about 18 streets, including Hillsboro, Elm, Davie, etc.

Oklahoma—State Highway Comm., Oklahoma City, lets contracts December 21 for 12 to 15 road projects, approximate cost \$500,000; J. M. Page, State Highway Engr.

Oklahoma, Wewoka—City received low bid from Hanson & Pierce, Oklahoma City, at \$57,000, for street paving.*

Oklahoma, Woodward—City, S. J. Dohrer, Clk., receives bids Dec. 16 for paving improvements in Dist. No. 6, 7, 8; 22,641 cu. yd. excavation, 72,020 sq. yd. plain concrete pavement; 15,730 lin. ft. straight curb; Black & Veatch, Consol. Engrs., Mutual Bldg., Kansas City, Mo.; Peter Martinson, Mayor.

S. C., Charleston—City Comm., plans paving Meeting St., Broad to Calhoun, with asphalt on present concrete base.

S. C., Greenville—Greenville County Commrs. receive bids January 8 for 8 mi. Buncombe road, from end of present pavement to point above Travelers Rest.

S. C., Spartanburg—City Commrs., T. J. Boyd, Clk., plans widening Magnolia St. 10 ft. and Woodward St. 15 ft.; D. G. Adams, City Engr.

S. C., Spartanburg—City plans widening North Converse St., between Main and St. John St.; D. G. Adams, City Engr.

S. C., Sumter—Lafayette Highway Assn., R. L. Freeman, Pres., Bennettsville, interested in paving Lafayette Highway.

Tenn., McKenzie—City plans street improvement, cost \$200,000. Address City Clk. See Financial News—Bond Issues Proposed.

Texas—State Highway Comm., Eugene T. Smith, Chmn., Austin, receives bids December 20 for 3 roads and bridge: Brooks County, 2.518 mi. grading, drainage structures and disintegrated limestone base course, 1-in. rock asphalt surfacing, State Highway No. 12, Falfurrias to Jim Wells County line; 13,998 mi. grading, drainage structures, and caliche base course, 1-in. two course limestone rock asphalt surface, Highway No. 12, Encino to Hidalgo County line; Lubbock County, 17,587 mi. grading and drainage structures, State Highway No. 7, from Lubbock to Hockley County line; Reeves County, for 44-ft. bridge on Highway No. 1, two 22-ft. concrete slabs, 2-A10-18 abutments, 18-ft. bent, about 1 mi. east of Toyah; 18,119 lbs. reinforcing steel; plans on file and from Res. and Div. Engrs.; A. C. Love, State Highway Engr.

Texas—State Highway Comm., Eugene T. Smith, Chmn., Austin, receives bids December 20 to grade Highway No. 10 through Johnson and Parker Counties; A. C. Love, State Highway Engr.

Texas—State Highway Dept., Eugene T. Smith, Chmn., Austin, plans 2½ mi. Tarvia road in Colorado and Fayette Counties, business streets of principal towns along highway and ¾ mi. tarvated road, each, in Welmar, Eagle Lake and Columbus.

Tex., Amarillo—City, Jeff D. Bartlett, Mgr., receives bids December 14 for 35,000 sq. yd. brick paving, 26,000 ft. combined curb and gutter, 38,000 sq. yd. excavation; plans from City Engr.

Tex., Brownsville—Cameron County Commrs., Oscar C. Dancy, Judge, plans concrete feeder roads, cost \$6,000,000. See Financial News—Bond Issues Proposed.*

Tex., Canyon—Randall County, Rector

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Lester, County Judge, plans hard-surfaced highways, cost \$250,000. See Financial News—Bond Issues Proposed.*

Tex., Corpus Christi—City, John T. Wright, Sec., plans paving Ocean Drive, from city limits to Alta Vista hotel property.

Tex., Corpus Christi—City plans paving 16 streets and avenues, including Carroll, Mesquite, Hughes. Address City Clk.

Tex., Crowell—Foard County Commrs. plan hard-surfacing section Lee National Highway, State Highway No. 28, through county. See Financial News—Bond Issues Proposed.

Tex., Eastland—City receives bids December 10 for 52 blocks street paving; Joe A. Wright, City Engr.

Tex., Farwell—Parmer County, E. F. Lokey, County Judge, plans road building, cost \$200,000. See Financial News—Bond Issues Proposed.

Tex., Floydada—Floyd County, E. C. Nelson, Jr., County Judge, plans road improvement, including hard surfacing Lee Highway, State Highway No. 28, approximate cost \$500,000. See Financial News—Bond Issues Proposed.

Tex., LaFeria—City, J. A. Raemond, Sec., plans street paving, cost \$50,000. See Financial News—Bond Issues Proposed.*

Tex., Matador—Motley County, C. L. Glenn, County Judge, plans gravel-surfaced highways, approximate cost \$350,000. See Financial News—Bond Issues Proposed.

Tex., Muleshoe—Bailey County, Wm. G. Kenedy, County Judge, plans high type surfacing on Highways Nos. 7 and 28; cost about \$500,000. See Financial News—Bond Issues Proposed.

Tex., Olton—Lamb County, E. N. Burles, County Judge, plans high type surfacing on Highways Nos. 7 and 28, approximate cost \$750,000. See Financial News—Bond Issues Proposed.

Tex., Paducah—Cottle County, James L. Whitley, County Judge, plans 42 mi. gravel surfaced and 30 mi. hard-surfaced highways; approximate cost \$750,000. See Financial News—Bond Issues Proposed.

Tex., Plainview—Hale County, Meade F. Griffin, County Judge, plans about 70 mi. roads, including Highways Nos. 9 and 28, approximate cost \$900,000. See Financial News—Bond Issues Proposed.

Tex., Vernon—Wilbarger County Commrs. plan hard-surfacing section Lee National Highway, State Highway No. 28, through county. See Financial News—Bond Issues Proposed.

Tex., Wellington—City, C. C. Small, Mayor, receives bids December 28 for about 40,000 sq. yd. brick pavement on concrete base; C. L. Hasle, Engr., Memphis.

Va., Richmond—City, R. Keith Compton, Director of Public Works, receives bids Dec. 10 to grade Riverside Drive through George E. Wyse property; plans on file.

Va., Virginia Beach—Town, Mayor Ashburn, plans paving all streets east and west from Fourteenth to Thirty-fifth St., estimated cost \$35,000. See Financial News—Bond Issues Proposed.

W. Va., Charleston—Kanawha County Court, Omer Given, Pres., plans road building in Jefferson Dist. See Financial News—Bond Issues Proposed.*

W. Va., Richwood—City plans paving Main St., from end of present paving to Fishing Rock at Dain, cost \$50,000. Address City Clk. See Financial News—Bond Issues Proposed.

W. Va., Williamson—Tug River Highway Assn., organized; W. S. Rosenheim, First Natl. Bank Bldg., Huntington; interested in hard-surfacing road from Huntington to Bluefield.

Contracts Awarded

Ala., Montgomery—State Highway Com., let contract to N. d. Gliddens & Co., Troy, at \$7176 to grade and drain about 1 mi. highway through U. S. Government reservation at Maxwell Field.*

Ala., Samson—City, G. D. King, Clk., let contract to T. S. Faulk & Co. at about \$40,000 to grade, drain and pave streets in business section.

Florida—State Road Dept., Tallahassee, let contracts for 2 roads: Broward County, Road 4, 13.46 mi. grading, from Fort Lauderdale to Palm Beach County line, H. D. Spangler, Miami, \$69,069; Road No. 2, Paynes Prairie, 2.14 mi. rock base surface, L. M. Gray, Gainesville, \$29,630.*

Fla., Madison—Madison County Commrs.

let contract to C. W. Sinclair, Madison, to maintain 180 mi. county roads.

Fla., Miami—Dade County Commrs. let contract to John J. Quinn Co., 116 N. E. 29th St., at \$97,185, to pave south side of county causeway, with rock base and 3-in. sheet asphalt.

Ga., Camilla—State Highway Dept., East Point, let contract to J. W. Guinn, at \$193,872, for 9.074 mi. paving, Camilla-Albany road.*

Ga., Louisville—State Highway Dept., East Point, let contract to C. V. Clark, Louisville, at \$15,000, for 10.893 mi. grading Swainsboro-Louisville road from point about 2 mi. south of Louisville.

Ga., Waycross—McDougald Construction Co., 315 Angier Road, Atlanta, has contract for 17 mi. asphalt surface, Dixie Highway to Ware-Bacon County line.

Ga., Waycross—City, Abram Cook, Mgr., let contract to Park Morrand Co., Waycross, at about \$11,000, to cover 2 blocks city canal on Isabella St.*

La., Baton Rouge—East Baton Rouge Parish Police Jury, F. A. Woods, Sec., let contract to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, N. C., at \$85,002, for asphaltic concrete on 5-in. Portland cement base on extension of North Boulevard and North Boulevard and Clay Cut loop.*

La., Monroe—City, P. S. Poag, Sec., let contract to J. J. Hamiter, 337 Washington St., Shreveport, at \$59,745 to pave Gordon, and \$8497 to pave Forest St.; 13,000 sq. yd. sheet asphalt, 10,000 lin. ft. curb and gutter; 100 sq. yd. sidewalks, 9000 cu. yd. grading.*

Miss., Jackson—City, A. J. Johnson, Clk., let contract to Dunn Construction Co., Chamber of Commerce Bldg., Birmingham, Ala. and Jackson, at \$25,966, for paving, curb, gutters and necessary storm sewers on Oldham St. and Grand Ave.; to Owens & Gaddis, 810 S. Gallatin St., at \$18,158, to improve Jackson and Mt. Vernon Sts.*

Mo., Joplin—City Commrs., O. P. Mahoney, Commr. of Streets, let contract to V. E. Koch, 702 N. Pearl St., at \$1.72 per sq. yd. to pave with concrete Chestnut St., Seventh to Eighth; to Tri-State Construction Co. at 45 cents per lin. ft. for curbs and 18 cents per lin. ft. for gutters on Bird Ave., Twentieth to Thirtieth-second.

N. C., Raleigh—R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, has contract to pave 18 streets and roads with asphalt, bitulithic, concrete, etc.

Okla., Tulsa—City Comm. let contract to Tibbets & Pleasant, 229 N. Nogales St., at \$5172, to pave streets in Dist. No. 756; Standard Paving Co., 1742 E. Sixth St., \$30,060, for asphaltic paving, Dist. No. 757; H. L. Canady Co., 1116 S. Lewis St., \$25,193, for asphalt paving, Dist. No. 758; Standard Paving Co., for paving Dist. No. 759; H. L. Canady, for asphalt paving, Dist. No. 760; all Tulsa.

Tenn., Memphis—City, C. C. Pashby, Clk., let contract to Geo. W. Turner, 280 Ayers St., to widen Union Ave., Dunlap to East.

Tex., Angleton—Brazoria County let contract to Allen & Smith, Bryan, at \$295,755, for 11,646 mi. grading, culverts, small bridges and shell and concrete surfacing, Highway No. 58; Austin Bldg. Co., Dallas, \$113,005 for bridges over 20-ft. span.

Tex., Archer City—Stuckey Construction Co., Kemp Hotel Bldg., Wichita Falls, has contract for street paving.

Tex., Dallas—City let contract to Central Bitulithic Co., Praetorian Bldg., at \$23,055, to pave Pearl St., Cora to Ross Ave.

Tex., Pampa—Stuckey Construction Co., Kemp Hotel Bldg., Wichita Falls, has contract for street paving.

Sewer Construction

Large sums are being expended for sewage facilities in connection with Land Development operations. Details will be found under that classification.

Fla., Vero Beach—See Roads, Streets, Paving.

La., Slidell—See Water Works.

Mo., Cape Girardeau—City reported receiving bids after Feb. 1 for interceptor sewer; E. L. Sallor, City Engr.

Mo., Eldon—E. A. Becker reported has contract at \$50,648 for vitrified clay pipe,

etc., and galvanized wrought iron pipe for sewer system.

Mo., Mexico—Fred M. Luth, 3000 Shenando St., St. Louis, reported has contract for Emmons and Singleton St. sewers.

Mo., St. Louis—Board of Public Service reported to expend \$7741,000 on sewers during 1927; including construction of Western Mill Creek Valley sewer and Wherry Ave. joint sewer; W. W. Horner, City Engr.*

Mo., Trenton—City plans extending sewer outlet at cost of \$10,000. Address The Mayor.

N. C., Charlotte—City rejected all bids for laying 14,000 ft. sewer pipe; will call for new bids December 11; C. D. Ison, City Engr.*

Okla., Bethany—Earl W. Baker & Co., Medical Arts Bldg., Oklahoma City, reported has contract at \$44,840 for construction of sewer system.

Okla., Blackwell—City let contract to McCoy Construction Co., Emporia, Kansas, for sewer lines; Black & Veatch, Engrs., Mutual Bldg., Kansas City, Mo.

Okla., Gage—City reported planning sewerage system; Mussion & Co., Engrs., Grain Exchange Bldg., Oklahoma City.

Okla., Medford—W. B. Carter, 1509 E. Admiral St., Tulsa, reported has contract for sewer system; V. V. Long & Co., Engrs., Colcord Bldg., Oklahoma City.*

Okla., Pond Creek—City plans sewer construction, cost \$50,000; install gasoline water pump, 250 gal. capacity; date of opening bids not set; V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City.*

Okla., Sand Springs—City reported plans sewer improvements; W. E. Davis, Cole Bldg., Tulsa, Consult. Engr.

Okla., Soper—City reported plans sewer improvements, cost \$25,000. Address The Mayor.

Okla., Tulsa—City Commrs. approved plans by Charles Schultz, City Engr., for expending \$86,968 for storm sewer construction; received bids on Jan. 7 for work.*

Tenn., South Pittsburg—City, Alana S. Kelly, Mayor, plans sewer improvements; Campbell & Wallace, Engrs., Holston Bank Bldg., Knoxville.

Tex., Fort Worth—City Council let following contract for sewer work: To Standard Paving Co., at \$91,919, for interurban district sanitary sewer; Tarrant County Construction Co., 1005 Calhoun St., at \$28,000, for storm sewer along Grand Ave. from North Main St. to Denver Ave. and at \$33,346, for Riverside storm sewer from Chandler and East Third Sts. to Covello St.; J. M. Purvis, 112½ W. Ninth St., at \$8149, for storm sewer from Nies St. and Grand Ave. to Trinity River; Beall & Lewis, at \$7434, for storm sewer from Ephram and Hanna Sts. to Roosevelt Ave.; J. M. Purvis, at \$25,274, for storm sewer from Twenty-second St. to Prospect Ave. and Jones St.*

Tex., Houston—Scott Shambaugh, 1400 Dowling St., reported, has contract for sewers.

Tex., Levelland—See Water Works.

Tex., Lewisville—City plans sewer improvements. See Financial News—Bond Issues Proposed.

Va., Virginia Beach—Town Council plans expending \$110,000 for sewer and paving; Robt. Taylor, Clk.

Telephone Systems

Ark., Malvern—Southwestern Bell Telephone Co., Page Ave., main office St. Louis, Mo., plans erecting exchange building, 1 story, 30x44 ft., brick and tile.

Ga., Montezuma—The Montezuma Telephone Co. has been acquired by E. H. Keator, 1613 Seventeenth St., Columbus, and G. F. Bunn of Montezuma; continue existing business.

Ky., Pikeville—Southern Bell Telephone & Telegraph Co., main office Atlanta, Ga., reported acquired the Eastern Kentucky Home Telephone Co. of Pikeville and the Whitesburg (Ky.) Co.; transfer involves exchanges at Pikeville and Whitesburg and approximately 400 miles toll line; contemplates improvements.

Md., Baltimore—Chesapeake and Potomac Telephone Co., G. H. Warren, Div. Mgr., reported, expend \$381,000 on additions, including underground cable and conduit and cable and aerial extensions in the Liberty, Pikeville and Hamilton sections; terminating trunk cables and additional central office apparatus in the Plaza-Calvert central offices.*

Mo., Jefferson City—Capital City Telephone Co. seeks 20-yr. franchise to furnish and supply telephone service.

N. C., Asheville—Frank Barber, Chmn. of

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Chamber of Commerce Radio Committee, interested in establishing \$35,000 community radio broadcasting station.

Tenn., Knoxville—Southern Bell Telephone & Telegraph Co., main office, Atlanta, Ga., reported will expend about \$125,000 on erection of addition to present plant at W. Magnolia and N. Broadway; 3-story, concrete and steel, faced with buff brick; Marye, Alger & Alger, Architects, Walton Bldg., Atlanta; E. F. Garratt, Dist. Mgr.

Tex., McAllen—Rio Grande Valley Telephone Co., C. A. Gates, owner, 724 Fidelity Union Bldg., Dallas, has plans for 2-story, 40x60 ft. telephone building, brick, terra cotta and frame; built-up roof; plate glass; steel sash; including brick garage and storage room 30x30 ft.; Arthur A. Brown, Archt., 509 Mercantile Bank Bldg., Dallas.*

Tex., Midland—The Alderman Telephone Co., capital \$100,000, incorporated; C. L. Alderman, C. M. Means.

Tex., Sherman—Northern Texas Telephone Co. increased capital, \$382,000 to \$457,000. Company advises increase in capital stock was made to provide funds for the purchase of telephone exchanges at Plano and Wylie, Tex.

Va., Danville—Chesapeake & Potomac Telephone Co. of Virginia, H. O. Eanes, plans expending \$50,000 on additions and improvements to system.

Va., Norfolk—Chesapeake and Potomac Telephone Co. of Virginia, J. C. Brown, local Mgr., reported, will expend \$250,000 on additions and improvements; work includes extensive main line conduit and cable relief in Norfolk, construction of long-distance cable between Norfolk and Virginia Beach; relief facilities will include placing about 500 poles, 50,000 ft. of aerial cable, 10,000 ft. underground conduit, 22 manholes, 40,000 ft. underground cable, about 2000 ft. submarine cable and cable terminal equipment in the central office also included in appropriation.*

Textile Mills

Ala., Albany-Decatur—Charles T. Main, Inc., Archt., 200 Devonshire St., Boston, Mass., receives bids until Dec. 16 for construction of Connecticut Mills Co.'s tire fabric plant.*

Ala., Florence—Robert & Co., Inc., Bona Allen Bldg., Atlanta, Ga., wires: "Building contract covering new plant for Gardiner & Warring Co., Amsterdam, N. Y., awarded to T. C. Thompson & Bros., Charlotte; contract on heating, fire protection and lighting will be let in about 6 weeks."*

Ala., Opelika—Merger of Pepperell Manufacturing Co., Biddeford, Maine, and Massachusetts Cotton Mills, Lowell, Mass., having mill at Lindale, Ga., reported approved by stockholders; plan calls for exchange of Massachusetts stock for that of Pepperell at rate of 8 shares for 5 without new financing; Pepperell stockholders voted to increase capitalization by 33,328 shares to provide the 31,250 new shares necessary to complete merger.

Ala., Piedmont—H. Y. Dempsey, Chrmn. Committee, reported interested in establishment of textile mill.

Ga., Calhoun—Curtis Cotton Mill Co., organized with Dr. W. M. Curtis, capital stock \$25,000; has site of 27 acres at McDaniel, will erect cotton mill, has let contract for 25,000 ft. of lumber for cottages and preliminary buildings.

Ga., Griffin—John E. Taylor promoting organization of Taylor Textile Corp. to manufacture cotton cloth and produce vegetable dyes and polishes; establish first plant at Griffin and dye plants at other points where this process will be used; details not determined.

N. C., Lumberton—J. E. Sirrine & Co., Engrs., Greenville, S. C., reported to soon let contract for weave shed for Jennings Cotton Mill.

N. C., Pittsboro—Chatham Mills, Inc., capital \$100,000, incorporated; A. C. Kluge, C. A. Matthews.

N. C., Salisbury—J. E. Sirrine & Co., Engrs., Greenville, S. C., reported to soon let contract for addition to bleachery of North Carolina Finishing Co.

N. C., Wilson—Titus Blatter & Co., 162 Fifth Ave., New York, reported considering establishment of textile plant.

S. C., Rock Hill—Industrial Cotton Mills Co., Inc., reported to repair building damaged by storm; J. E. Sirrine & Co., Greenville, will draw plans.

Tex., Harlingen—Hamon & Co., McDonald Bldg., Corpus Christi, reported preparing plans for \$250,000 cotton mill.

Water Works

Large sums are being expended for water works in connection with land development operations. Details will be found under that classification.

Fla., Fort Lauderdale—Andrews Fay Construction Co., Commercial Arcade, Miami, contractor for filter plant, will probably sublet drain contract to Powell Brothers, Ft. Lauderdale Bank Bldg.; Federal Construction Co., Birmingham, Ala., contractor for water distribution system, will probably let sub-contract for portion of work to W. G. Fritz & Co., West Orange, N. J.

Fla., Montverde—Town will soon begin construction of \$40,000 water works plant; J. B. McCrary Engineering Co., Engrs., Atlanta, Ga.*

Ga., Macon—Board of Water Commrs. receives bids January 11 for 10,000,000-gal. centrifugal pump. (See Machinery Wanted—Pump.)

Ga., Savannah—D. M. Clark low bidder for excavating, back filling and ramming trenches for water works system.

La., Slidell—City plans calling for bids in about 2 weeks for construction of water works and sewer system, cost \$175,000; J. W. Billingsley, Consult. Engr., Interstate Bank Bldg., New Orleans.*

Mo., Seymour—City let contract to Will F. Plummer, Union Nat'l Bank Bldg., Springfield, at \$32,000 for installing water works system; plans, etc., by A. T. Kendrick, Seymour; contract includes drilling deep well, installing pumps, erecting water tower and entire distributing system.

N. C., Kernersville—C. M. Guest & Son, N. McDuffie St., Anderson, S. C., has contract for complete water works system; cost \$80,000; install 6500 ft. of 8-in. pipe line with fittings; the Carolina Engineering Co., Engrs., Johnston Bldg., Charlotte. (See Machinery Wanted—Filter Plant Equipment; Pipe and Fittings; Valves; Electrical Equipment; Power Line.)

Okl., Antlers—City voted \$24,000 water works bonds. Address The Mayor.

Okl., Blackwell—City let contract to Standard Paving Co., 1742 E. 6th St., Tulsa, for water works, including 2,000,000-gal. filtration plant, 500,000-gal. storage reservoir and pump house, high service, to Burley Machinery Co., Oklahoma City, for 500 h.p. boiler; Black & Veatch, Engrs., Mutual Bldg., Kansas City, Mo.*

Okl., Broken Arrow—City reported planning water works system. Address The Mayor.

Okl., Brace (Mail Fairvalley)—City reported plans water works system; Musson & Co., Engrs., Grain Exchange Bldg., Oklahoma City.

Mo., Neosho—City reported planning election on \$35,000 water works bonds. Address The Mayor.

S. C., Spartanburg—Water Works Comsn. postponed indefinitely letting of contract for construction of 750,000 or 1,000,000-gal. standpipe. (Bids lately noted to be opened Dec. 7.)*

Tenn., Centerville—City, M. Bowen, Mayor, reported planning water works improvements.

Tenn., Knoxville—Standard Underground Cable Co., 17th and Pike Sts., Pittsburgh, Pa., reported has contract for furnishing city with approximately 16 miles of copper fabric protected wire for linking water works pump and filter station with high service reservoir.

Tex., Dalton—City plans construction of water works system; Dalton & Parker, Engrs., 319 Wilson Bldg., Dallas.

Tex., Levelland—City voted water and sewer bonds. See Financial News—Bond Issues Proposed.*

Tex., Lorenzo—M. L. Friday, Arlington, reported has contract at \$42,000 for complete water works system.

Tex., Lewisville—City plans water works and sewer improvements. See Financial News—Bond Issues Proposed.

Woodworking Plants

Ga., Moultrie—Colquitt County Cooperage Co., W. C. Vereen, Pres., will rebuild burned plant; construction to begin immediately.*

Miss., McComb—McComb Box Co., capital \$10,000, incorporated; T. W. Rhymes, Mrs. T. W. Rhymes

Mo., Dexter—The Dexter Manufacturing Co. taking over plant buildings, machinery, etc., of the Reuter Hub and Spoke Co.; no new buildings are to be erected immediately; will manufacture spokes, bent rims and other wood products.*

Mo., Kansas City—Sectional Bookcases—The C. J. Lundstrom Manufacturing Co. of Littleforks, N. Y., reported leased space in the Campbell Bldg., Sixteenth and Walnut Sts.; establish branch to serve western section.

N. C., Hiddenite—Murdoch Chair Co., capital \$125,000, incorporated; H. J. Murdoch, Statesville; E. E. Lackey, Hiddenite.

Tenn., McMinnville—W. S. Lively Furniture Co., Inc., capital \$10,000, chartered; W. S. Lively, W. N. Hannah.

Tex., Jasper—Jasper Veneer & Manufacturing Co., capital \$22,000, incorporated; P. T. Butler, L. H. Metz.

FIRE DAMAGE

Ala., Felix—J. Freeman Suttles' cotton gin; loss \$5000.

Ala., Selma—Ginhouse owned by J. Freeman Suttles; loss \$5000.

Ark., Blytheville—Negro school building; loss \$10,000. Address School Board.

Ark., Gould—Plant of Gould Light and Ice Co.; loss \$50,000.

Ark., Newport—Residence of Robert Holden, Jr.; loss \$6500.

Ark., Pine Bluff—Portion of the Metropolitan Steam Laundry building.

Ark.-Tex., Texarkana—Union Furniture Co., 223 W. Broad St.; George C. Beals, Propr.

D. C., Washington—Brookland Baptist Church, 12th and Newton Sts. N. E.; loss \$20,000. Address The Pastor.

Fla., Eagle Lake—Garage and servants' quarters of Terrace Hotel, W. F. Boyd, Winter Haven, Owner; loss \$15,000.

Fla., Eau Gallie—Apartment house on Pineapple Ave. owned by Dr. Phillips.

Ga., Atlanta—Wallace Daniel's residence, Andrews Drive and Austell Way.

Ga., Griffin—John W. Lindsay's residence, S. Sixth Street Rd.

La., Eros—Garber Bros.' mercantile store, W. H. Stuckey's store, City Cafe, K. L. Smith's store and 2 buildings owned by W. R. Jones of Rochelle; loss \$26,000.

La., Cedar Grove, near Shreveport—Shreveport Foundry & Machine Co.'s pattern shop; loss \$12,000.

La., Hammond—Freight depot of Illinois Central Railroad, F. L. Thompson, Ch. Engr., Chicago, Ill.; loss \$50,000.

Md., Baltimore—Three-story building at S. E. cor. North and Maryland Aves., Charles E. Herring's store on first floor, apartments above; loss \$20,000.

Md., Cockeysville—C. Frank Ensor's feed mill on York Rd.

Miss., Bay St. Louis—Mayor G. Y. Blaize's residence; loss \$30,000.

Miss., Hattiesburg—Currie Paxton Co.'s automobile body plant.

Miss., McCall Creek—Sig Calcoate's residence.

Miss., Vicksburg—Moncure Dabney's residence, Warrenton Rd.

Mo., Sedalia—Memorial Baptist Church, Colored; loss \$30,000. Address The Pastor.

N. C., Asheville—Pearson Sanitarium, Pearson Drive; loss \$5000. Address The Supt.

N. C., Dunn—Mrs. Sarah J. Warren's residence in Sampson County near Dunn; loss \$10,000.

N. C., Gastonia—Lebovitz's store on E. Main St.

N. C., Greenville—J. Lonnie Tucker's residence, Simpson.

N. C., Lenoir—Bernhardt Chair Car Co.'s factory; loss \$350,000.

N. C., Ruffin—Residences of Mrs. Hope Holderly and Roy Chatham.

N. C., Salisbury—M. A. Trexler's residence near Salisbury.

Okl., Durant—G. R. Tinnin's residence, Beech St. and 12th Ave.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Okla., Kremlin—T. B. Born hardware store; loss \$10,000.

Okla., Tulsa—Warehouse and oil compounding plant of Bradford Oil Co., Eighth St. and Yorktown Ave.; loss \$13,000.

S. C., Greenville—Palmetto Bldg., S. Main St., owned by Chas. McAllister; loss \$30,000.

S. C., Timmons—H. C. Weldon's residence.

Tenn., Byrdstown—Roller mill owned by J. W. Barnes; loss \$7,000.

Tenn., Knoxville—Shearman Concrete Pipe Co.'s machine shop on Hiwassee Ave.; loss \$15,000.

Tenn., Morristown—City National Bank; loss \$10,000. Address C. G. Seaton, Vice-Pres.

Tenn., Nashville—The city paving plant at Fatherland and Cumberland Sts.; loss \$50,000; address City Clerk.

Tenn., Sweetwater—Laundry plant owned by Sweetwater Ice Co.

Tex., Beaumont—J. Claude Dawson's residence.

Tex., Cameron—Hefley Theater building; loss \$8,000. Address The Manager.

Tex., Campbell—Dwelling near Campbell, owned by J. W. Cannon.

Tex., Dallas—Martin Hotel building; also damaged St. George Hotel; loss \$50,000; address the Proprietor.

Tex., Galveston—Otis Inn, 2306 Avenue Q, Mrs. A. M. Heckman, operator.

Tex., Kingsville—Roman Catholic Church; loss \$10,000. Address The Pastor.

Tex., Manson—S. N. Pitzele general store; loss \$40,000.

Tex., Nocona—Apartment house occupied by Mrs. Ida Pennell; loss \$6,000.

Tex., Wilmer—Mitchell & McCurdy's cotton gin, loss \$10,000.

Va., Carson—Bank of Carson; garage owned by E. J. Decker; Dinwiddie County offices; loss \$8,000.

Damaged by Storm

Tenn., Florence—Nashville, Chattanooga & St. Louis R. R. Station, H. McDonald, Ch. Engr., Nashville; Baptist Church, address The Pastor.

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

Ark., Little Rock—Young Men's Christian Assn., J. B. Withee, Gen. Sec., Eighth and Scott Sts., plans to start work by Jan. 15 on \$25,000 first unit of \$150,000 Y. M. C. A., Scott Sts., start work at once on \$25,000 first unit of \$175,000 Negro Y. M. C. A., Tenth and Spring Sts.*

Md., Hagerstown—Woodmen of the World started work on building, N. Potomac St.

Mo., Jefferson City—Capitol Lodge No. 110, Knights of Pythias, will start in Spring to remodel dwelling, 217 E. McCarty St., for lodge quarters.

N. C., Mount Airy—Ancient Free and Accepted Masons consider erecting temple; 4 or 5 stories.

Okla., Blackwell—Grand Lodge of Elks, care E. R. Walcher, Exalted Ruler, Blackwell Lodge, B. P. O. E., plans orphanage.

S. C., Anderson—Chamber of Commerce announces gift of site and \$15,000 for Y. M. C. A.; plan to raise additional \$15,000.

Bank and Office

Ala., Selma—Peoples Bank & Trust Co., H. F. Cooper, Pres., consider erecting \$200,000 bank and office building after plans by Warren, Knight & Davis and Chandler C. Yonge, Asso. Archts., Empire Bldg., Birmingham, Ala., and Pensacola, Fla., on site lately noted damaged by fire at \$15,000 loss; Gothic type, Indiana limestone and cream brick, 6 stories, elevators; also consider remodeling present structure.*

Fla., Miami—Atlas Rock Co., 300 S. W. North River Drive, started work on \$10,000 office building; reinforced concrete block, 2 stories, 50x65 ft. concrete foundation; Brad Curry, Archt., City Nat. Bank Bldg.; Biscayne Engineering Co., Engr., Harlin Bldg., Address C. W. Bell, care Owner. See Machinery Wanted.*

Fla., Tampa—Standard Oil Co., Hillsboro and Lozano Sts., erect \$175,000 office building; bids in.

Ga., Atlanta—Crum & Foster, 170 Spring St., having preliminary plans drawn by Ivey & Crook, Candler Bldg., for \$200,000 insurance office building, Spring St.; fireproof, brick and stone facing.*

La., New Orleans—Capitol Building and Loan Assn. receives bids Dec. 15 (extended date) for fireproof office building; 1 story, 40x90 ft., limestone trim, composition roof, steel sash, marble and tile floors, tile wainscoting, marble and wrought iron bank fixtures, hot air heat, oil burning equipment; following contractors estimating: Geary-Oakes Co., Inc., Queen and Crescent Bldg., New Orleans; Burkes & Haley, 851 E. Boulevard; S. W. Leard, N. Boulevard; Jones, Roessle & Olschner, Archts., Raymond Bldg., all Baton Rouge.*

S. C., Greenville—Chas. McAllister will repair Palmetto Bldg., S. Main St., noted damaged by fire at \$30,000.

Tex., Beaumont—American National Bank, Ed Stedman, Chmn., Bldg. Comm., have plans nearing completion for fireproof bank and

office building, Orleans and Bowie Sts.; steel, reinforced concrete, brick and stone, 12 stories, 75x100 ft., cost \$600,000; J. Ruskin Bailey, Archt., 1606 Main St., Houston; Tisdale, Stone & Pinson, Asso. Archts., 419 Ind. Life Bldg., Nashville, Tenn.; H. M. Sanford, Struct. Engr., 440 West Bldg., Houston.*

Tex., Houston—D. A. Singer, First Nat. Bank Bldg., erect \$1,000,000 office building; Jos. Finger, Archt., Keystone Bldg.; details to be arranged prior to June 1.

Tex., Houston—Miss Kate Scanlan plans to remodel old court of Scanlan Bldg. into Spanish type tile and marble court; cost \$25,000; Wm. Ward Watkins, Archt., Scanlan Bldg.

Tex., San Antonio—Travis Investment Co., Harry Rogers, Pres., Travis Bldg., erect \$2,000,000 office building, Travis and Soledad Sts.; 21 stories with 4-story pyramid tower, 137x113 ft., U shape, reinforced steel, concrete and brick, cast stone trim, granite base, U 40x50 ft., steel sash, oak interior trim, bronze hardware, 4 high-speed elevators; stores on ground floor and section of basement, 19 floors for offices, elevator machinery, water tanks, etc., on top floor; Geo. Willis, Archt., Builders Exchange Bldg.; M. L. Diver, Struct.-Mech. Engr., Calcasieu Bldg.; Lon T. Wright & Co., Contrs., Builders Exchange Bldg.

Va., Norfolk—David Pender, Pender Bldg., having plans drawn by Neff & Thompson, Seaboard Bank Bldg., for remodeling building, Granby St. and Brooke Ave.; elevators; stores on first floor, 2 upper floors for offices.*

Churches

Ark., Brinkley—Methodist Church, Rev. G. E. Patchell, Pastor, erect \$15,000 brick Sunday school; 2 stories and basement, 35x60 ft., built-up roof; Chas. L. Thompson, Archt., 504 Home Ins. Bldg., Little Rock; bids in.

Ark., El Dorado—First Christian Church, Rev. A. J. Bradshaw, Pastor, plans \$30,000 building; brick and stone or brick and tile with stone trim, 2 stories and basement, 48x80 ft., cement, oak and pine floors, cement foundation, asbestos shingle or built-up roof; furnishings, equipment, etc., \$5,000; architect not selected. See Machinery Wanted.*

Ark., El Dorado—Methodist Protestant Church, W. D. Wingfield, Chmn., Bldg. Comm., plans \$100,000 building.

Ark., Gurdon—Presbyterian Church remodel building and add about 10 Sunday school rooms. Address The Pastor.

Fla., Jacksonville—Riverside Presbyterian Church, Marcus Fagg, member, erect \$160,000 building, Park and Post Sts.; main auditorium, including gallery, seat 1000.

Fla., Jacksonville—B'nai Israel Congregation interested in \$250,000 campaign for Jewish Community Center, Silver and W. Third Sts. Address The President.

Fla., Tampa—First Baptist Church erect \$125,000 Sunday school; Jas. Knox Taylor, Archt., 101½ E. Lafayette St.; plans ready for bids about Dec. 15.

Ga., Macon—Mulberry Street M. E. Church

South, Jas. H. Porter, Chmn., Bldg. Comm., has postponed until Jan. bids on building; veneer with limestone and brick, 3 stories, oak and linoleum floors, slate roof, cost \$250,000; Dunwoody & Oliphant, Archts., 450 Broadway.*

Ga., Savannah—St. Michael and All Angels Church, Rev. Henry Bell Hodgkins, Rector, contemplates building.

Ky., Newport—Bishop Francis W. Howard, 1140 Madison Ave., Cincinnati, O., plans new Roman Catholic church, Highland Ave. and Alexandria Pike, Southgate, near Newport.

La., Algiers, New Orleans—Very Rev. E. P. McGrath, S. M., Pastor, Church of the Holy Name of Mary, interested in chapel, Behrman Ave.

La., Monroe—First Methodist Church plans Sunday school building, Wood St. Address The Pastor.

La., New Orleans—Coliseum Baptist Church having new plans for Sunday school drawn by Sam Stone, Jr., & Co., Masonic Temple Bldg.; ready for bids about 45 days; brick, 2 stories, composition roof, plastered interior, wood floors, warm air heat, cost \$60,000. (J. A. Petty & Sons, Inc., Godchaux Bldg., lately noted Contr.)*

La., Ponchatoula—Haase & Barbay, L. W. Eaton, 1601 N. Boulevard, both Baton Rouge, Albert Tolle, Hammond, and Dominick Anzalone, Independence, are estimating on \$30,000 St. Joseph's R. C. Church; bids opened Dec. 15; Wogan & Bernard, Archts., Title-Guarantee Bldg., New Orleans.*

Mo., Sedalia—Memorial Baptist Church, Colored, plans to rebuild structure burned at \$30,000 loss. Address The Pastor.

N. C., Greensboro—Westminster Presbyterian Church, Rev. C. E. Hodgkin, Pastor, plans \$100,000 addition; 2 stories.

N. C., Oxford—First Baptist Church, Dr. O. R. Mangum, Pastor, probably start work about Jan. 1 on \$100,000 building, site present structure.*

Okla., Hominy—First Christian Church, Rev. R. R. Hildebrand, Pastor, receiving bids at office Sorey & Vahlberg, Braniff Bldg., Oklahoma City, for brick and stone building; cost \$25,000; 1 story and basement.

S. C., Spartanburg—First Baptist Church, Horace L. Bomar, Chmn., Bldg. Comm., receives bids Dec. 30 for masonry, steel and wood Sunday school; cost \$115,000; 2 and 3 stories, 30,000 sq. ft. floor area, wood floors, brick and concrete foundation, slate roof. Address J. Frank Collins, Archt., 703 Andrews-Law Bldg. See Machinery Wanted.*

Tex., Abilene—First Baptist Church completing plans for Sunday school annex; brick and concrete; Wm. Nichol and Geo. F. Campbell, Archts., 29-30 Radford Bldg.

Tex., Coleman—Baptist Church soon let contract for Sunday school and parsonage. Address The Pastor.

Tex., Corpus Christi—Good Shepherd P. E. Church, Richard King, Chmn., Bldg. Comm., have plans ready about March 1 for bids on brick and concrete building; 1 story, 40x100 ft., brick or tile floors, concrete foundation, slate roof; John M. Marriott, Archt., 207 First Bank Bldg.; Willard E. Simpson & Co., Engrs., Nat. Bank of Commerce Bldg., both San Antonio.*

Tex., Fort Worth—First Christian Church, W. S. Cooke, Chmn., Bldg. Comm., will open bids about Feb. 1 for new Sunday school and enlarging main auditorium; steel frame, concrete slabs, cast stone and face brick exterior, 3 and 6 stories, 150x95 ft., concrete foundation, asbestos shingle and composition roof; cost about \$200,000; Clyde H. Woodruff, Archt., 400 Reynolds Bldg.*

Tex., Fort Worth—North Fort Worth Baptist Church has \$55,000 permit for brick building, 15th and the Boulevard. Address The Pastor.

Tex., Galveston—Scandinavian Lutheran Seamen's Mission, Rev. E. Bonnevie-Kliver, 2401 Strand St., Pastor, erect \$10,000 mission and church building, 18th and Market Sts.

Tex., Lubbock—St. Paul's P. E. Church, Jed Rix, member Bldg. Comm., erect \$25,000 Gothic type building; Peters & Haynes, Archt.

Tex., San Antonio—Baptist Temple, Rev. J. L. Yelvington, Pastor, receives bids Dec. 13 at office Conger & Conger, Bedell Bldg., for concrete, brick and wood joist building. Gevers and Drexel Aves.; cost \$45,000, 3 stories, 65x107 ft., concrete and B & B pine floors, reinforced concrete foundation, composition and gravel roof; furnishings, equipment, etc., \$10,000; Will N. Noonan Co., Archt., Builders Exchange Bldg.*

Tex., Wichita Falls—Highland Heights Christian Church, Dr. Paul Henry Packard, Pastor, plans \$135,000 building; brick, stone

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and reinforced concrete, 3 stories and basement, 95x150 ft.: Pate & Thompson, Archts., 1005 City Natl. Bank Bldg.

Va., Richmond—Woodland Heights Baptist Church, S. S. Ford, member, plans building.

Va., Tenn., Bristol—Ike Levine is member of committee to remodel dwelling for synagogue.*

W. Va., Charleston—Trinity Lutheran Church, Glenn R. Edgar, member, erect \$23,000 chapel and Sunday school building, Lee and Elizabeth Sts.; Luther M. Leisenring, Archt., 817 14th St. N. W.

Va., Lynchburg—West End Methodist Church let contract for Sunday school, Fort Hill. Address The Pastor.

City and County

Ala., Birmingham—Jefferson County Board of Revenue, Lacey Edmundson, Pres., receives bids Dec. 14 for Juvenile Court Detention Home, Elyton; brick and concrete, 3 stories, built-up roof; plans, specifications and information from Harry B. Wheelock, Archt., Steiner Bank Bldg.*

Ala., Decatur—Morgan County Board of Revenue selected Ben Price, Age-Herald Bldg., Birmingham, to prepare plans for rebuilding courthouse lately noted burned at \$75,000 loss.

Ark., Lonoke—Lonoke County, E. M. High, County Judge, probably soon call for bids for \$270,000 courthouse; fireproof, brick, cut stone and reinforced concrete, 3 stories with jail on roof, 62x216 ft.; H. Ray Burks, Archt., 306 Home Ins. Bldg., Little Rock.*

Fla., Jacksonville—Duval County Board of Commrs. erect \$20,000 county stockade dormitory; reinforced concrete and stucco, 2 stories, 73x23 ft., concrete floors and foundation, tar and gravel roof; Mark & Sheftall, Archts., 412 Clark Bldg. See Machinery Wanted.*

Fla., Lakeland—City, Anton Schneider, City Mgr., receives bids Dec. 17 for construction of certain features of Lake Mirror Civic Center.

Fla., Miami—City having plans completed by H. Hastings Mundy, 218 N. E. Fifth St., for band stand and rostrum; bids in 1927.

Fla., Tampa—Hillsborough County defeated \$1,500,000 courthouse bonds. (Bonds lately noted voted.)*

La., Baton Rouge—East Baton Rouge Parish Police Jury rejected bids for remodeling third floor of courthouse; revise plans and call new bids; Wogan & Bernard, Archts., Raymond Bldg.*

La., New Orleans—City, Arthur J. O'Keefe, Mayor, voted \$7,500,000 bonds, including \$2,000,000 for municipal auditorium, \$500,000 for criminal courts building and \$750,000 for parish prison and house of detention.*

La., New Orleans—City Park Comsn. receives bids Dec. 12 for hollow tile and stucco public restroom, City Park; 1 story, 50x75 ft., tile roof, plastered interior, copper screens; Weiss, Dreyfous & Seiferth, Maison Blanche Bldg.

Miss., Corinth—City Council purchased Elks' Bldg.; convert for city hall.

N. C., Asheville—City erect fire station, North Asheville. Address City Council.

S. C., Columbia—City, L. B. Owens, Mayor, contemplates auditorium.

S. C., Orangeburg—Orangeburg County Board of Commrs. have sketches by J. B. Urquhart, Palmetto Bldg., Columbia, for remodeling courthouse; cost \$100,000.*

Tenn., McKenzie—Town votes Dec. 14 on \$25,000 town hall bonds. Address Town Commrs.

Tenn., Memphis—City, C. C. Pashby, Clk., alter dwelling for museum, Chickasaw Gardens; new hating plant, etc.; Hubert T. McGee, Archt., 801 Fidelity Bank Bldg.

Tex., Brownsville—Cameron County remodel courthouse; enlarge vault. Address County Commrs.

Tex., El Campo—City erecting \$12,000 city hall-fire station building. Address City Commission.

Tex., Houston—City, Allie Anderson, Fire Commr., plans 2 fire stations.

Tex., San Antonio—City, John W. Tobin, Mayor, selected Adams & Adams, Builders Exchange Bldg., as architects for remodeling and 3 additional stories to 3-story City Hall; cost \$250,000; reinforced concrete and stone, probably new elevators.

Dwellings

Ala., Hollywood—M. D. Smith, Jr., 2728 12th Ave. N., Birmingham, receiving bids for hollow tile and stucco residence, Hollywood; 1 story, 50x60 ft., tile and built-up roof, oak and tile floors, steam heat; J. E. Salle, Archt., 2223 Age-Herald Bldg.

Ala., Tuscaloosa—University of Alabama, Shaler Houser, Sec., erect frame residence; 2 stories, hardwood floors, composition roof, hot air heat; Miller & Martin, Archts., 911 Title-Guaranty Bldg., Birmingham.

Ark., Bald Knob—J. K. Jameson, care White Way Service Station, erect 2-story frame residence.

Ark., Bentonville—Jas. Floyd, Gary, Ind., contemplates remodeling and erecting addition to residence; cost about \$15,000.

Ark., Fort Smith—W. A. Southall, 619 S. 21st St., plan residence, 200 block Lecta Ave.

Ark., Hot Springs National Park—Mr. Russell, care Russell-Gibbs Drug Co., 426 Central Ave., contemplates residence.

Ark., Little Rock—H. A. Kempner erect brick veneer, stone and stucco residence, Pulaski Heights; 2 stories, about 30x50 ft., composition shingle roof, oak floors, tile bath; Thos. H. Harding, Archt., 508 Exchange Bldg.

Ark., Little Rock—T. A. Marks, Route No. 6, P. O. Box 290, erect frame residence; composition roof; Wm. Dill, Archt., 605 Boyle Bldg.

Ark., Little Rock—Rev. C. D. Pettaway, 519 E. 21st St., erect brick veneer residence; 2 stories and basement, about 62x35 ft., composition shingle roof, oak floors, tile baths, laundry, garage in basement; H. Ray Burks, Archt., 307 Home Ins. Bldg.

Ark., Ogema—J. Craig erect residence.

Ga., Atlanta—Brady Harper, 558 N. Boulevard, erect 6 brick veneer dwellings, 800 block Euclid Ave. N. E.; 1 story; total cost \$18,000.

Ga., Atlanta—Lucian L. Knight, Peachtree Heights Rd., erect 3 brick veneer dwellings, 822-32-38 Lynn St. N. E.; 1 story; total cost \$15,000.

Ga., Atlanta—Mrs. Ella Smith erect 14 frame dwellings, 44-70 Grove St.; 1 story; total cost \$16,000.

Ga., Brunswick—Robt. L. White plans 2 or 3 bungalows.

Ga., Savannah—C. B. Womble, 1320 Live Oak St., plans bungalow, 40th St. near Waters Ave.

Ga., Valdosta—Robins, Ltd., Toronto, Canada, erect number frame dwellings, connection with farms development in South Georgia and North Florida.

Ga., Waycross—H. B. Lee, Jr., erect residence, Ware St.

Ga., Waycross—E. Kontz Bennett erect English Tudor type residence, Cherokee Heights; Wallin & Corner, Archts., Realty Bldg., Savannah, and Waycross.

Ky., Louisville—S. Fleischaker plans to improve residence, 2301 Bonnycastle Ave.

La., New Orleans—I. Singer, 3624 Napoleon Ave., erect brick residence, Peters Ave. and Magnolia St.; tile roof and baths, tile and hardwood floors, plastered interior, oil burner, hot water heaters, copper screens; Lockett & Chachere, Archts., Title-Guarantee Bldg.; soon ready for bids.

La., New Orleans—John P. Short, 4430 S. Claiborne Ave., contemplates residence, Forshey St.; work probably start in Jan.

La., New Orleans—W. Thauwald erect \$16,000 duplex, Peters Ave. near Story St.; 2 stories, tile roof; E. A. Ross, Contr., 2825 Orchid St.

La., New Orleans—John L. Cahill erect duplex, Upperline and Robert Sts.; J. J. Lagarde, Archt., Canal-Commercial Bldg., wants sub-bids on plumbing, plastering, slate roofing, hardware, tiling, flooring, paving, painting, sheet metal work and metal garage.

La., New Orleans—Henry J. LaBranche, 2100 D'Abadie St., erect 1-story raised frame and stucco residence, N. Claiborne Ave. near Dumaine St.; composition roof, plastered interior, tile baths, oak floors, warm air heat; E. M. Reyes, Archt., 822 Perdido St.; bids opened Dec. 8.

La., New Orleans—W. Labot, Jr., erect brick veneer residence, Audubon St.; slate and composition roof, finished floors, tile and marble work; Armstrong & Koch, Archts., Audubon Bldg.; bids in.

Md., Baltimore—Frank Novak Realty Co., Gunther Bldg., purchased 25-acre tract on Belair Rd. and Herring Run; plans ultimate erection of about 400 two-story brick daylight type dwellings.

Md., Baltimore—Harry G. Carter, 1908

Frederick Ave., erect 7 brick dwellings, 1100 block Homestead St.; 2 stories; total cost \$25,000.

Md., Baltimore—Dr. Frank S. Lynn, 41 W. Preston St., erect \$35,000 residence and garage, Rugby Rd. near Warrenton Rd., Guilford; 2½ stories, stone.

Md., Baltimore—Harry G. Carter, 1908 Frederick Ave., erect 7 brick dwellings, 1000 block Homestead St.; 2 stories; total cost \$35,000.

Md., Baltimore—Geo. A. Gegner, 257 S. Ellwood Ave., erect stucco residence, York Rd., Anneslie.

Md., Baltimore—North Ashburton Development Co. erect 41 brick dwellings, 3100 block Sequoia Ave.; 2 stories; total cost \$100,000.

N. C., Charlotte—First Presbyterian Church, Dr. Albert Johnson, Pastor, expend \$15,000 for alterations and repairs to manse, W. Trade St.; M. E. Boyer, Jr., Archt., 1516 E. 4th St.

N. C., Charlotte—Lex Marsh, Jr., 24 E. 4th St., erect two \$10,000 dwellings, Circle Ave. and 2202 Avondale Ave.

N. C., Durham—P. M. Sawyer, 919 Green St., erect frame residence, Green St.; cost about \$10,000, 13 rooms.

N. C., Raleigh—Lundy & Clarke, C. E. Lundy, Pres., 4 E. Martin St., erect number dwellings.

N. C., Winston-Salem—Wachovia Building Co. erect \$10,000 dwelling, Hawthorne Rd.

Okla., Blackwell—R. E. Hess erect brick residence, 220 W. College Ave.; 2 stories; Glen H. Thomas, Archt., Wichita, Kan.

Okla., Oklahoma City—H. M. Lee, Liberty Nat'l Bank Bldg., erect 3 dwellings, 2200 block N. Indiana Ave.

Tenn., Jellico—B. B. Wolfe plans English cottage near Jellico; 6 rooms; Albert E. Credig, Archt., Mercantile Bldg., both Knoxville.

Tenn., Elizabethton—Watauga Development Corp., holding company for American-Bemberg Co., plans 10 dwellings on Johnson City-Elizabethton highway near American-Bemberg plant.

Tenn., Knoxville—Interstate Building Corp., 200 General Bldg., J. G. Cowl, Pres., erect dwellings connection with development.

Tenn., Memphis—Dr. Chas. E. Diehl, Southwestern Univ. campus, erect residence, Snowden Ave. and University Drive.

Tex., Houston—C. Bauer has permit for residence, Dallas Ave. near Hamilton St.; cost about \$10,000.

Tex., Houston—E. J. Burke Co., First Nat'l Bank Bldg., erect 20 dwellings, 4800 block Lyons Ave.; cost \$3000 each.

Tex., Houston—L. A. Stevenson, 4516 Jackson St., plans residence, Del Monte Drive, River Oaks.

Tex., Houston—A. J. Whitson, Alvin, erect 14 brick veneer bungalows, Pineview Addition; cost \$6000 each.

Tex., Houston—S. J. Brockstein, New York, erect \$45,000 Colonial country residence, west of River Oaks; 2 stories, frame; Henry F. Jonas & Tabor, Archts.-Engrs., Union Nat'l Bank Bldg.; work start about Jan. 1.

Tex., Houston—Mrs. Velma C. Dodge, 1315 Barksdull St., erect \$26,000 brick veneer residence, Del Monte St. and Mockingbird Lane; 2 stories, attic and basement, 51x55.8 ft., oak floors, reinforced concrete foundation, tile roof; Jos. W. Northrop, Jr., Archt., West Bldg., receiving bids. Address Archt.

Tex., Houston—L. O. Koen, 1413 Harold St., erect \$14,000 brick veneer residence, North Blvd.; 2 stories, attic and basement, 39 x44 ft., oak floors, reinforced concrete foundation, red cedar shingle roof; Jos. W. Northrop, Jr., Archt., West Bldg., receiving bids. Address Archt.*

Tex., Houston—H. A. Meyer, care Meyer & Sorelle, Scanlan Bldg., purchased site, Calumet and Live Oak Sts., Riverside Terrace; will probably build.

Tex., Houston—L. L. Jones, 2122 Freeman St., erect \$14,000 brick veneer residence and garage, 1219 Autrey St.; 2 stories.

Tex., Houston—L. W. Lindsay, Second Nat'l Bank Bldg., erect 3 dwellings and garages, 2013 Ruth, 5506 Crawford and 1514 Calumet Sts.; brick veneer, 6 and 8 rooms and bath; total cost \$38,500.

Tex., San Antonio—Chas. Baxter, care United States Trust and Savings Bank, erect 20 frame bungalows, Gladstone, Weinberg and Carter Aves. and Orange St.; 4 and 5 rooms.

Va., Norfolk—W. E. Smith, 4312 Hampton Blvd., erect 3 frame dwellings, 7406-10-14 Shirland Ave.; cost \$9000 each.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Va., Roanoke—Porter Oney, 1511 Kenwood Blvd., erect 4 brick-cased dwellings, Colonial St.; cost \$5000 each.

Hospitals, Sanitariums, Etc.

Fla., Arcadia—Pugin & Wallace, 149 Sixth Ave. N., Nashville, Tenn., reported drawing plans for \$150,000 general hospital.

Fla., East Winter Haven—Scenic Highlands Hospital and Sanatorium Assn., Inc., Dr. A. Edwin Burrows, Campaign and Business Mgr., P. O. Box 762, Bartow, having preliminary plans drawn by Francis J. Kennard & Son, 303 Zack St., Tampa, for \$500,000 to \$600,000 hospital; Kellogg & Martin, Asso. Archts. 516½ Franklin St., both Tampa; 150 general beds, 50 beds for children and 50 sanatorium beds; nurses' training school accommodate 50; probably let contract about Jan. 1.*

Fla., Fort Lauderdale—Drs. R. E. Repass, First Natl. Bank Bldg., Leslie Maxwell and D. E. Carter purchased Edwards Hospital; plan to add new wards, increase laboratory space; change name to Memorial Hospital.

Fla., Ocala—City Council receives bids Dec. 21 for fireproof Munroe Memorial Hospital; cost about \$130,000, 3 stories, 142x36 ft. with 50x36-ft. wing, Massillon bar joists and concrete floors, concrete foundation; separate bids for (1) general; (2) plumbing, heating and electrical work; (3) masonry; (4) plastering; Geo. MacKay, Archt.; Fredk. Uezzell, Asso. Archt., Robertson Block.*

Fla., Orlando—Negro Women's County Club, Susie Moore, Pres., plans \$30,000 hospital, W. Gore and Piedmont Aves.; work start about Jan. 1.

Fla., Sarasota—Haltom Hospital erect additional floor; cost \$20,000, brick and steel composition roof, metal lath, plaster.

Fla., Tarpon Springs—City receives bids Dec. 14 for hollow tile and stucco hospital; 2 stories and basement, 35x62 ft., cost \$18,000; furnishings, equipment, etc., \$7000; A. C. Lyons, Archt., Box 3453, Clearwater; Harry McCreary, Engr.*

La., Alexandria—Baptist Hospital have plans ready about 30 days for bids on reinforced concrete nurses' home; 3 stories, plastered interior, composition roof, tile floors, steel sash, copper screens; Herman J. Duncan, Archt., 120 Murray St.*

La., New Orleans—Charity Hospital probably have plans ready latter part Dec. for bids on \$175,000 internes' home, Tulane Ave.; reinforced concrete, cast stone trim, 3 stories, composition roof, plastered interior, tile floors, copper screens, accommodate 78; Favrot & Livaudais, Ltd., Archts., Hibernia Bldg.*

Miss., Columbus—Dr. Gardner receives bids Dec. 15 for alterations and additions to 2-story frame and stucco hospital; cost \$30,000, new wards, extend plumbing and heating systems; plans and specifications from Weiss, Dreyfous & Seiferth, Archts., Maison Blanche Bldg., New Orleans, La.; following contractors estimating: L. W. Hancock, McArthur & McLemore, both Meridian, Miss.; M. Dye, Columbus; Beckelheimer & Small, R. Small, Massengale & McIntosh, all Hattiesburg; M. Dye, Mr. Burk, both Columbus; Estes-Williams Construction Co., Dermon Bldg., Memphis, Tenn.*

N. C., Concord—Cabarrus County Real Estate Co. organized with Dr. R. B. Rankin, Pres.; will erect \$75,000 hospital and nurses' home to replace Concord Hospital, Tribune St.; C. C. Hartman, Archt., Jefferson Bldg., Greensboro.

Okl., Oklahoma City—Rev. E. C. Anderson, reported receiving bids for brick, stone and reinforced concrete Methodist Hospital; cost \$250,000; 4 stories and basement, 100 beds; Edw. L. Gahl, Archt., S. W. Natl. Bank Bldg.

Tenn., Knoxville—Fort Sanders Hospital merged with Riverside Hospital and purchased Edgehill Sanitarium; to be called Fort Sanders-Riverside Hospital, Dr. C. P. Jones, member; will erect 52-bed addition at Fort Sanders; 60x120 ft., 2 operating rooms; also plan overpass from Fort Sanders to Edgehill.

Hotels and Apartments

Ala., Andalusia—Dixie Hotel, care the Manager, contemplates rebuilding recently burned structure.

Ala., Birmingham—R. H. Harris, 2005 S. 10th Ave., has plans by H. D. Breeding, Archt., Watts Bldg., for 3-story, brick, 62x38 ft., 6-unit apartment building, 2005 Tenth Ave.; built-up tar and gravel roof, steam heat.

Ala., Birmingham—Sanders & McCormack, care H. D. Breeding, Archt., Watts Bldg., soon receive bids for construction of 3-story,

brick, 44x82 ft., 8-unit apartment house, Mountain Ave. and Avalon St.; built-up tar and gravel roof, steam heat.

Fla., Coral Gables—Biscayne Lumber & Construction Co. has purchased and plans to finish uncompleted apartment house at 107 Avenue Mendoza; \$20,000, 2 stories, 12 families; Alfred Schimek, Archt.

Fla., Fort Lauderdale—Florodora Corp. of Fort Lauderdale remodel arcade building into 52-guest room hotel.

Fla., Jacksonville—I. Edelstein will erect \$50,000, 2-story, 6-apartment house for Forbes and Acosta Sts.; Charles C. Oehme, Archt.

Fla., Jacksonville—J. C. Harris, 220 W. 12th St., erect seven 2-story, frame, 14-flat buildings, Enterprise between Aubert and Minnie Sts.; \$35,000.

Fla., Miami—J. S. Engler, 207 N. W. 10th St., erect three \$5500, 4-unit apartment houses at 1600 N. W. First Court.

Fla., Miami—W. L. Helms, 151 N. W. 18th St., has plans by B. E. Muller for \$25,000, 2-story building on Schararazed Blvd., in Opa-Locka; 3 stories, each 16x38 ft., and 2 apartments on first floor, 4 apartments above.

Fla., Milton—Floridate Townsite Corp. plans to break ground about January 1 for \$100,000, 2-story, 121x260 ft. Floridate Inn, at Floridate; concrete foundation, tile roof, concrete exterior walls, hardwood, tile and linoleum flooring, equipment and furnishings cost \$25,000; no general contract, owners to do all sub-letting; address proposals to John Stafford White, Archt. (See Machinery Wanted—Celotex; Electric Refrigerators; Flooring; Roofing Tile.)

Fla., Miami—A. Sansone, 2234 S. W. Sixth St., erect \$13,500, 4-unit apartment house at 2230 S. W. Sixth St.

Fla., Tampa—G. Herbert French, Archt., Riverside Drive, completed plans for \$175,000 apartment hotel and store building.

Ga., Atlanta—J. H. Whisenant, 885 Highland Ave., has permit for \$75,000, 2-story, concrete, tile and stucco apartment building at 856 Briarcliff Rd.

La., Cameron—Dr. A. R. Sweeney, Port Arthur, Tex., Pres. of Cameron Development Co., reported contemplating construction of \$200,000 gulf beach hotel in Cameron Parish.

La., Lake Charles—Corporation organized to erect \$625,000, 7-story, steel and concrete hotel building; preliminary plans in progress by R. S. McCook, Archt., Frank Bldg.; reinforced concrete foundation, equipment and furnishings cost \$200,000. (See Machinery Wanted—Flooring; Tile; Steel Sash and Trim; Roofing; Mail Chutes; Dumb Waiters; Vaults; Marble; Terra Cotta Trim; Electric Refrigerators.)*

La., New Orleans—Elias Pallet, 2302 Prytania St., contemplates erecting apartment building, Canal and Derbigny Sts.; architect not yet selected.

La., New Orleans—Wogan & Bernard, Archts., Title-Guarantee Bldg., selected to prepare plans for remodeling 3-story brick building at 740-2 Royal St. into apartment hotel.

La., New Orleans—Walter Cook Keenan, Archt., Liverpool and London and Globe Bldg., receiving bids for construction of frame and stucco, 12-apartment building, Willow and Broadway Sts.; tile and composition roof, tile baths, warm air heating.

Miss., Winona—Mrs. W. B. Van Kirk receiving bids, no definite date for closing, for erection of \$35,000, 2-story, 41x106 ft. and 30x41 ft., L-shaped hotel building; brick and mill, stone trim, pine and concrete floors, built-up roof, steam heat; Frank R. McGeoy, Archt., Greenwood; following contractors bidding: Estes-Williams Construction Co., Dermon Bldg., Memphis, Tenn.; Robert Ellis, Clarksdale; S. L. McGinnis, Greenwood; Moss Brothers, Grenada.*

N. C., Charlotte—Virgil Pressnell, 1216 E. Boulevard, erect \$10,000 apartment house at 310 Crescent Ave.

N. C., Charlotte—Warren & Wetmore, Archts., 16 E. 47th St., New York City, reported selected to prepare plans for construction of \$1,000,000, 200-room tourist hotel on Providence Road, W. S. Pharr property, for Providence Park Hotel Co., care Edgar W. Pharr, Law Bldg.; builders probably Dwight P. Robinson & Co., Inc., Engrs.-Contrs., 125 E. 46th St., New York.*

Okl., Oklahoma City—F. M. and W. M. Corporation has plans by John Dawson Matthews, 2119 W. 18th St., for \$425,000, 5-story, U-shaped, 120x82.6-ft. apartment building; 35 one-room apartments, 50 three-room and 18 two-room efficiency apartments; first floor for storeroom, basement for garage and storage purposes; brick, reinforced concrete and steel construction, automatic elevators.

N. C., Pinehurst—Pinehurst, Incorporated, Richard S. Tufts, Vice-Pres., has plans in progress by Lyman Sise of Haven & Hoyt, 45 Bromfield St., Boston, Mass., for 5-story fireproof hotel building at Knollwood; Mr. Tufts advises: "Plans are not yet completed nor have any contracts been awarded."

Tenn., Algood—Tim Lynn purchased Central Hotel; will remodel.

Tenn., Memphis—J. A. Goodwin erect \$14,000, 16-room apartment house, 1093 Linden St.; heat \$2000.

Tex., Beaumont—V. Rinando erect \$20,000, 2-story, brick veneer, 8-room apartment house on Broadway.

Tex., Childress—Arch Nave purchased site for proposed 5-story fireproof hotel building; \$250,000, 115x90 ft., 100 guest rooms, steam heat.

Tex., Dallas—E. M. Turner erect \$13,000, 12-room, brick veneer, 2-apartment house, 4121-23 Hawthorne St.

Tex., Dallas—Lee White, 814 E. Sixth St., erect \$23,000, 32-room, brick veneer, 8-apartment house at 4213-19 Lemmon St.

Tex., Fort Worth—John Chaffin, Glen Garden, erect \$45,000, brick veneer apartment house, 100 block Clover Lane.

Tex., Houston—Harry L. DeWitt has plans by J. W. Northrop, Jr., West Bldg.; start work immediately on \$110,000, 2-story, brick veneer, 96-room apartment building at Blodgett and St. Charles Sts.; owner builds.

Va., Danville—Jefferson Avenue Improvement Co., care John T. Watson, remodeling old General Hospital at Jefferson and Loyal Sts. for apartments; \$15,000.

W. Va., White Sulphur Springs—Graham, Anderson, Probst & White, Archts., 80 E. Jackson Blvd., Chicago, Ill., reported to soon receive bids for construction of \$2,000,000 addition to Greenbriar Hotel; Thornton Lewis, Pres., Greenbriar Hotel Co.

Miscellaneous

Ala., Troy—State Baptist Orphanage, Dr. J. O. Colley, Supt., received \$25,000 gift from executor of estate of late Miss Myrtle K. Haley of Newton; planning to erect memorial building in future.

Fla., Jacksonville—Trustees of Jacksonville Free Public Library, Joseph F. Marion, Librarian, Ocean and Adams Sts., receives bids until Dec. 17 for construction of Branch Library Building in Wilder Park, near corner Davis and Missouri Sts.; Mellen C. Greeley, Archt., 32 W. Forsyth St.

Ga., Savannah—Tybrisa Co., Inc., Ernest J. Haar, Pres., Commercial Bldg., plans improvements at Tybrisa, to include additional bathhouses.

Md., Baltimore—Richard F. Curley, 1621 N. Washington St., plans to convert building at 1808 N. Broadway into funeral parlor and undertaking establishment.

Mo., St. Louis—Euclid House Committee, Mrs. E. J. Irwin of Union Ave. Christian Church, Chmn., planning extensive improvements to Euclid House, Waverly Pl.

N. C., High Point—F. J. Sizemore, Sec. High Point Chamber of Commerce, advises: "With regard to the Southern Furniture Exposition Building, plans are being discussed for the erection of another Exposition Building as large as the one we have."

Tex., Beaumont—F. W. and D. E. Steinman & Sons, Archts., 411 San Jacinto Life Bldg.; R. D. Chastain, 2065 Broadway, and J. J. Johns, 2003 North St., compose syndicate, acquired property in Liberty Ave. for future development.

Railway Stations, Sheds, Etc.

La., Hammond—Illinois Central Railroad, F. L. Thompson, Ch. Engr., Chicago, Ill., reported to rebuild freight depot recently burned at \$50,000 loss.

Schools

Ala., Birmingham—Jefferson County Board of Education considering erection of \$90,000 county high school building in Fulton Springs district.

Ala., Marion—Perry County Board of Education, William R. Carothers, Supt., will erect new school building at Helberger.

Ala., Montgomery—Board of Education, Louis C. Cardinal, Pres., care M. & O. R. R., soon receive bids, to close January 1, on \$1,000,000, fireproof, hollow tile and face brick High School building, extension S. Court St.; Frederick Ausfeld, Archt., Shepherd Bldg.*

Ark., McGehee—School Board take bids about January 1 on \$160,000 high school

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building; Mitchell Seligman, Archt., 206 Pine St., Pine Bluff.

Fla., Frostproof—Frostproof Special Tax School District No. 22 voted \$45,000 bonds to be used as follows: Complete High School building and auditorium, \$30,500; place tile roof on same, \$4000; furnishings, \$9000; heat, \$1500. Address A. R. Connor, Sec. Polk County Board of Public Instruction, Bartow.*

Fla., Gainesville—University of Florida contemplating construction of swimming pool.

Fla., Miami—Dade County Board of Public Instruction, Ray L. Hamon, Director of Building Construction, P. O. Box 2012, receives bids until about Jan. 4 for construction of \$1,000,000, fireproof, reinforced concrete and steel, 1, 2, 3 and 4-story Senior High School building in blocks bounded by S. W. 24th and 25th Aves. and First and Third Sts.; tile and composition roofing, concrete foundation; equipment, furnishings, etc., cost about \$400,000; Klehnel & Elliott, Archts., 930 Seybold Bldg.; E. A. Stuhman, Engr., 944 Seybold Bldg. See Machinery Wanted.*

Fla., St. Augustine—Florida School for the Deaf and Blind (See Fla., Tallahassee.)

Fla., St. Petersburg—Pinellas County Board of Public Instruction, Clearwater, considering \$400,000 bond election for erection of 3 additional elementary schools.

Fla., Tallahassee—State Board of Control, P. K. Yonge, Chmn., Aragon Hotel, Jacksonville, will soon let contracts for construction of \$75,000 academic building at Florida State College for Women, Tallahassee; \$65,000 dormitory at Florida School for the Deaf and Blind, St. Augustine, and \$150,000 administration building at Agricultural and Mechanical College for Negroes.*

Ga., Atlanta—Emory University, Harvey W. Cox, Pres., will have completed plans in Jan. for 5-story, 50x150-ft. Chemistry Building; masonry walls, Georgia marble trim, concrete floors and foundation, tile roof; Ivey & Crook, Archts., Candler Bldg. (See Machinery Wanted)—Hollow Tile; Steel Sash and Trim; Wire Glass; Roofing Tile; Dumbwaiters; Ventilators; Marble; Terra Cotta Trim.*

Ga., Rabun Gap—Dr. J. K. Cort, Chmn. of Rabun Gap and Nacoochee Consolidated School districts, announced plans for erection of 2 dormitories and an auditorium; architects not selected.

La., Colfax—Grant Parish Board of Education has revised plans and specifications in progress by C. Scott Yeager, Archt., Alexandria, for 2-story brick school building; all bids recently rejected.

La., Gretna—Jefferson Parish School Board, J. C. Ellis, Sec., will open bids January 7 for construction of \$150,000 High School building at Gretna, and for alterations and additions to High School at Metairie Ridge, to cost \$35,000; William T. Nolan, Canal-Commercial Bldg., Archt. for Gretna school, and Theo. L. Perrier, Canal-Commercial Bldg., both New Orleans, Archt. for Metairie Ridge building.*

La., Ruston—Louisiana Polytechnic College, Dr. John R. Conniff, Pres., has plans in progress by Edward F. Neild, 125 City Bank Bldg., Shreveport, for remodeling administration building; \$150,000 recommendation for appropriation before legislature.

La., Shreveport—Clarence W. King, Archt., Giddens-Lane Bldg., probably place plans and specifications on market for general contract bids next week for construction of \$200,000, 3-story and basement, brick, reinforced concrete and stucco, 65x250 ft., colonial type, fireproof Administration Building for Girls' Baptist College in South Highland, for M. E. Dodd foundation fund, Rev. M. E. Dodd, Pres.; composition roof, gas steam radiator heating, tile baths, skylights, copper screens, steel closet partitions.*

Md., Frederick—Maryland State School for the Deaf, Prof. Ignatius Bjorlee, Supt., planning \$75,000 building program; include new school to accommodate 20 classes and restoration of Hessian Barracks.

Miss., Corinth—Gift Consolidated School District voted \$10,000 bonds toward erection of \$20,000 school building. Address Alcorn County Board of Education.

Miss., Hattiesburg—School Board have plans and specifications in 30 days by N. W. Overstreet, Archt., Overstreet Bldg., Jackson, for \$85,000, 1-story and basement, reinforced concrete, steel frame, fireproof school building; brick and stone trim exterior, plastered interior.

Miss., Jackson—Board of Education selected C. H. Lindsay, Archt., Lamar Life Bldg., prepare plans for two \$100,000 grammar school buildings.*

N. C., Charlotte—Board of School Commis-

sioners, H. P. Harding, Supt. of Schools, planning early construction of Fourth Ward Junior High School and \$30,000, 60x170-ft., steel and stucco on tile gymnasium at Central High School; tentative plans for gymnasium drawn by Lockwood, Greene & Co., Johnston Bldg.*

Tenn., Chattanooga—University of Chattanooga planning construction of concrete stadium on Chamberlain Field.

Tex., Dallas—Southern Methodist University, E. Gordon Perry, Chmn. Building Committee, erect \$30,000, 2-story, brick building to house present heating and power plant; Coburn, Smith & Evans, Archts., Republic Bank Bldg.

Tex., Edinburg—H. C. Baker, Supt. of Schools, announced plans for erection of science building and junior college building.

Tex., Sherman—Kidd-Key College, Dr. E. L. Spurlock, Pres., plans to let contract this month for construction of \$150,000 Administration Building.*

Tex., Sierra Blanca—Board of Education, Mrs. W. C. Carson, Pres., selected Trost & Trost, Archts., Two Republics Bldg., El Paso, and 119 W. Sixth St., Amarillo, prepare plans for \$30,000 brick school building.

Tex., Van Horn—Board of School Trustees selected Trost & Trost, Archts., Two Republics Bldg., El Paso, and 119 W. Sixth St., Amarillo, prepare plans for \$25,000 brick school building.

Va., Lovettsville—Lovettsville Community League, L. P. Hickman, Pres., promoting erection of new school building. Address Loudoun County Board of Education, Leesburg.

Va., Roanoke—School Board, D. E. McQuilkin, Supt., contemplates \$1,000,000 bond issue for new school buildings and additions to existing buildings; building program includes: 17-room addition to Jackson Junior High, \$150,000; 8-room elementary school in Morningside Heights, \$60,000; 23-room junior high in Virginia Heights, \$220,000; 8-room elementary in Wasena, \$60,000; 25-room junior high in northwest section, \$235,000; 25-room high for colored children, \$200,000; \$75,000 for procuring sites.

W. Va., Barboursville—Greater Morris Harvey College successfully completed campaign for \$100,000 toward \$400,000 building fund; to be matched by equal amount by Bruce and Bilton McDonald of Logan.*

W. Va., Barboursville—Boards of Education of Barboursville District and Barboursville Independent School District purchased seven-acre tract in South Barboursville as site for high school building.

W. Va., Chester—Chester Independent School District voted December 14 on \$60,000 school bonds. Address Board of Trustees.

Stores

Ark., Hollywood—D. M. Ray purchased site; contemplates erecting store and residence.

Ark., Little Rock—Gov. George W. Donaghey, owner of old First National Bank building, S. E. cor. Main and Markham Sts., reported has plans for \$250,000 business building to replace present structure.

Fla., Daytona Beach—Chadwick Furniture Co., 7 H. Bay St., Jacksonville, acquired site on Magnolia Ave., near N. Palmetto Ave., for proposed 4 to 6 story furniture store and warehouse building; no immediate building plans.

Fla., Mount Dora—Mount Dora Arcade Building, Inc., organized with capitalization of \$200,000, plans to acquire property and erect arcade building.

La., New Orleans—A. M. and J. Solari, Ltd., 201 Royal St., opened bids at office Weiss, Dreyfous & Seiferth, Archts., Maison Blanche Bldg., for remodeling of 4-story, brick building at Royal and Iberville Sts.; E. W. Ulrich Glass Co., 808 Baronne St., low bidder at \$21,911.

Md., Baltimore—Hecht Brothers, Malcolm Hecht, Treas., Baltimore and Pine Sts., announced plans for expansion; proposed building to cost \$700,000, L-shaped, and be erected adjoining present store on east, having frontage of 80 ft. on Baltimore St., with depth of 176 ft. to Redwood St.; concrete and steel faced with brick, 6 stories and basement; Abbott Merk & Co., Inc., Archts.-Engrs., 175 Fifth Ave., New York; Smith & May, Const. Archts., Calvert Bldg.; construction bids to be asked in spring.

N. C., Charlotte—E. Y. Keesler erect \$10,000 brick store buildings, First and McDowell Sts.

N. C., Greensboro—J. N. Coe, 306 American Bldg., closed contracts for erection of 6 retail store buildings adjoining the two he is now building on S. Greene St., between

Sycamore and Washington Sts.; cost \$210,000; 3 stories and basement, limestone, face brick, terra cotta, marble, each to be 100 ft. deep; two to be built for C. A. Banks, Benbow Arcade, others for W. S. Jones, American Bank Bldg., John W. Simpson, W. H. McGlamery and Mr. Coe.

Okla., Taloga—Dr. E. M. Loyd will erect 2-story building on Main St.

Tenn., Chattanooga—W. T. Grant Co., 455 Seventh Ave., New York, reported negotiating for lease on Market St. building owned by Mrs. N. H. Grady, G. A. Veach and Virginia I. Riddle; will remodel or possibly rebuild.

Tenn., Knoxville—Herbert D. Aston, Empire Bldg., has plans by Albert Gredig, Mercantile Bldg., for 2-story, brick building on Western Ave.; front of cream-colored brick and terra cotta; plate glass fronts on both floors.

Tex., Amarillo—Amarillo Furniture Co., 214 Arthur St., has plans in progress by Guy A. Carlander, 15 Massie Bldg., for 4-story, 100x135 ft., brick, reinforced concrete and hollow tile store building; face brick, skylights, ventilators, metal windows, fire escapes.

Tex., Amarillo—White & Kirk, 516 Polk St., will remodel department store building; interior remodeling, new elevators, etc.; private plans.

Tex., Brownsville—E. Manautou will have completed plans about Jan. 1 by Wm. D. Van Sicken, Maltby Bldg., for \$16,000, 48x120 ft., brick and reinforced concrete business building.

Tex., Houston—F. C. Barnes, 606 Welch St., erect \$15,000 store building at 1736 Westheimer St.

Tex., Houston—J. L. Jones, Cotton Exchange Bldg., has plans by J. W. Northup, West Bldg., for \$17,500, 1-story, brick and hollow tile store building. Polk, between Caroline and Austin Sts.; open bids Dec. 13.

Tex., Mercedes—G. K. Wattson soon start work on \$60,000 store and office building; also having plans drawn for \$25,000 business building at Weslaco.

Tex., San Angelo—G. Wendland, 31 E. Crockett St., has plans for 1-story, 75x140 ft., reinforced concrete business building.

Tex., San Antonio—E. L. Altgelt and others, Frost Bank Bldg., recently purchased site at Houston and Main Sts.; planning construction of commercial building, cost about \$300,000.

Tex., San Antonio—J. M. Bennett, Jr., care Standard Trust Co., 421 E. Commerce St., opened bids for construction of addition to business building at 221 E. Houston St.; J. E. Dickey, Builders Exchange Bldg., \$25,216; plumbing, Chalkey Bros., 218 E. Romana St., \$649; heating, A. H. Shafer, 418 N. St. Marys St., \$791; wiring, Kirkwood & Wharton, 456 Main Ave., \$2675; elevators, American Elevator Co., 308 E. Houston St., \$7295; Phelps & DeWees, Archts., Gunter Bldg.*

Tex., San Marcos—H. Brevard Department Store, Ike Wood, Vice-Pres., planning to rebuild recently burned structure.

Theaters

Fla., Gainesville—Col. Robert E. Davis and Paul Sydney of St. Petersburg reported planning construction of \$300,000 motion-picture theater and store building.

Fla., Tampa—Nicholas Mitchell, Archt., 308 Cass St., advises \$250,000 theater building held up indefinitely.

Okla., Marlow—Frank Miller, owner of Whiteway Theater, announced plans for construction of new theater.

Warehouses

Ark., Fort Smith—Gibson Oil Co., care local Manager, contemplates erecting warehouse on Wheeler Ave.

Fla., Tampa—James Knox, Archt., 3010 Tampa St., preparing sketches for \$125,000 warehouse.

Ky., Louisville—Arthur G. Tafel revising plans for \$300,000 office, showroom and warehouse building.

Miss., Yazoo City—Gilfong Co., Vicksburg, reported planning construction of warehouse.

Tex., Houston—Hughes Tool Co., 300 Hughes St., has permits for \$40,800 addition to warehouse and \$23,910 addition to heating plant, 300 Hughes St.

Tex., McCombs—Frick-Reid Supply Co. reported to rebuild warehouse recently burned at \$155,000 loss.

Va., Portsmouth—Southgate Forwarding & Storage Co., T. S. Southgate, plans immediate rebuilding of 2 warehouses at terminals destroyed by storm; \$150,000.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

BUILDING CONTRACTS AWARDED

Association and Fraternal

Mo., St. Louis—V. B. F.—S. M. T. Lodge, 2621 Lawton St., has \$10,000 permit for additions to 2-story club, 9x22 ft. and 22x64 ft., composition roof, steam heat; J. W. Mullins, Contr., 4569A Laclede St.

Bank and Office

La., New Orleans—Following sub-contracts let for \$1,200,000 office building for New Orleans Public Service, Inc.: Marble work, Albert Weiblen Marble and Granite Co., 521 City Park Ave.; plastering, Monahan Plastering Co., 716 Canal-Commercial Bldg.; reinforcing steel, Ole K. Olsen, 822 Perdido St.; Viskalt roofing, Blattmann-Weeser Sheet Metal Works, Inc., 1001 Toulouse St.; sheet metal work, American Sheet Metal Works, Hagan Ave. and Perdido St.; ventilating system, Standard Sheet Metal Works, 635 St. Peters St., all New Orleans; hollow metal work, Metal Door and Trim Co., La Porte, Ind.; ornamental and misc. iron, Mayer Godchaux Co., Inc., 718 Poydras St.; ornamental and misc. iron, Price Evans Foundry Co., Anderson Ave., Chattanooga, Tenn.; struct. steel, McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa.; terrazzo, Glanoli Co., 19 Houston St., Atlanta, Ga.; hollow tile work, W. J. Hammett Co., 15 E. Fayette St., Baltimore, Md.; bronze work, Superb Bronze & Iron Co., Brooklyn, N. Y.; granite work, Cold Spring Granite Co., Cold Spring, Minn.; limestone, Indiana Limestone Co., Bedford, Ind.; millwork, National Sash & Door Co., Inc., 600 N. Dup. St.; sprinkler system, Automatic Sprinkler Corporation of America, Whitney Bldg., New Orleans; Favrot & Livaudais, Ltd., Archts., Hibernia Bldg.; Geo. J. Glover Co., Inc., Contr., Whitney Bldg., New Orleans.*

Tex., Fort Worth—R. O. Dulaney, Farmers and Merchants Bank Bldg., will erect 2 additional stories to \$700,000 Petroleum Bldg., Sixth and Throckmorton Sts., under construction by H. B. Friedman, 402 First Natl. Bank Bldg.; 19,000 sq. ft. additional floor space; Wyatt C. Hedrick, Archt., First Natl. Bank Bldg.; Mr. Dulaney and J. P. Johnston, member, Johnston & McCarney, W. T. Waggoner Bldg., will convert adjoining store building into 12-story office building.*

Tex., Merkel—Farmers State Bank let contract to A. W. Balfanz & Bro. to remodel building; cost \$20,000, brick, 2 stories; David S. Castle Co., Archts., both Abilene.*

Tex., San Angelo—Following sub-contracts let for \$300,000 San Angelo National Bank and office building; cut stone: Indiana Limestone Co., Bedford, Ind.; hollow metal doors, Variety Fire Door Co., 2958 Carroll Ave., Chicago, Ill.; artificial stone, Ernest Oates, 3125 Routh St.; iron, R. J. DeWees Co., Slaughter Bldg.; Browne steel windows, Universal Building Products Co., Slaughter Bldg.; struct. steel, Mosher Steel and Machinery Co., 900 S. Austin St.; rein. steel, Concrete Engineering Co., Athletic Bldg.; hollow building tile, Jeffers-Harry Brick and Tile Co., 1209 1/2 Main St.; elevators, Otis Elevator Co., 1820 Young St.; wiring, N. E. Busby & Co., 111 S. Haskell St.; vault doors, Mosler Safe Co., Santa Fe Bldg., all Dallas, Tex.; painting and decorating, F. Hensel Co., Builders Exchange Bldg.; millwork, Steves Sash and Door Co., 602 Monterey St., both San Antonio, Tex.; sheet metal, Wendland Sheet Metal Works, San Angelo; plumbing and heating, A. T. Cheaney, 211 S. 5th St. Waco and San Angelo; Anton F. Korn, Archt., Thomas Bldg.; R. O. Jameson, Engr., S. W. Life Bldg.; Henger & Chambers, Contrs., Slaughter Bldg., all Dallas.*

Va., Clarendon—Chas. T. Jessil, care Arlington Art Store, starting work on \$50,000 Spanish type building for Law and Title Co. of Arlington County; hollow tile and brick, granite trim, 2 stories, 40x40 ft., oak floors, tile and cement foundation, slag roof; Upman & Adams, Archts., Woodward Bldg., Washington, D. C.; A. C. McMillin, Contr., 609 Poplar Ave. See Machinery Wanted.*

Churches

Fla., Bradenton—Church of Christ, Tenth Ave. and 17th St., erecting \$18,000 building; interlocking tile and concrete, 1 story, 49x62 ft., wood floors, built-up composition roof. Address proposals on furnishings, equipment, etc., \$2000, to Robt. E. Wright, 509 Leonard St.; A. C. Price Archt., Manatee Ave.; H. C. Parker in charge of constr.*

Fla., Fort Lauderdale—First M. E. Church, South, Second St. and Andrews Ave., erecting reinforced concrete and brick building; 2 stories, 40x84 ft., concrete and wood floors, composition and asbestos roof; Sutton & Rountt, Archts.-Engrs., 302 Morse Arcade,

Hollywood; H. H. Ryder, Contr.; electric work, Sherman Electric Co.; plumbing, W. Smith. See Machinery Wanted.

Mo., St. Louis—St. Phillip's Lutheran Church, Colored, Rev. Paul E. Gose, Pastor, erecting \$25,000 building, Goode and St. Ferdinand Aves.; auditorium seat 150, classrooms; Theo. Steinmeyer, Archt., International Life Bldg.; Fischer Bros., Contrs.

N. C., Mount Holly—Presbyterian Church, Rev. W. D. McInnis, Pastor, interested in new Presbyterian Church near Adrian and Madora Mills, gift of C. E. Hutchinson; work started; frame, 25x45 ft.

Okla., Tulsa—Second Presbyterian Church let contract to R. E. Mangrum for brick, stones and steel building; 1 and 3 stories, balcony and part basement, 100x150 ft., seat 350; Chas. W. Bolton & Son, Archts., Schaff Bldg., Philadelphia, Pa.; Donald McCormick, Supervising Archt., Mid-Continent Bldg.

City and County

Ark., Eudora—City erect brick and steel jail; 1 story, 76x20 ft., 2 steel cells; J. V. Overton, Contr.

La., Lafayette—Lafayette Parish Police Jury let contract at \$215,391 to General Contracting Co., 615 Nogalitos St., San Antonio, Tex., for courthouse and jail; plumbing and heating, Escudier Bros., Lafayette, \$19,051; jail, Ark. Fries & Son Steel Construction and Engineering Co., Covington, Ky., \$24,955; structure reinforced concrete, steel, stone and pressed brick, 3 stories and basement, marble, tile and wood floors reinforced concrete foundation, composition and tile roof; Wm. T. Nolan, Archt., Canal-Commercial Bldg., New Orleans. See Machinery Wanted.*

La., Minden—City Council let contract at \$18,588 to F. C. McClannahan, Homer, for fire station; brick and reinforced concrete, 2 stories; auditorium, offices, living quarters for firemen; plans by Contr.*

La., Monroe—City P. A. Hoag, Sec.-Treas., let contract to W. T. Calhoun for fire station; J. W. Smith, Archt., Ouachita Bank Bldg.*

Md., Baltimore—Board of Awards, Mayor Howard W. Jackson, Pres., let contract at \$1,498,000 to J. Henry Miller, Inc., Eutaw and Franklin Sts., for city hall annex; W. H. Emory, Jr., Archt., 18 E. Lexington St.; Henry Massart, Struct. Engr., 328 N. Charles St.; G. E. Painter Co., Mech. Engr., 19 E. Pleasant St.; J. W. Easter, Elevator Engr., Continental Bldg. (Address of J. Henry Miller, Inc., recently given incorrectly).*

N. C., Asheville—City Commission let contract at \$32,850 to Beeler & Co., Asheville and Johnson City, Tenn., for clubhouse at Municipal Golf Course, Black Mountain Rd.; English type, rubble granite, variegated slate roof, showers, lockers; heating and plumbing, Pumphord & Pope, 413 Haywood Rd., W. Asheville, \$4989; rough granite, limestone veneer and brick work, Dante Martin; millwork, Citizens Lumber Co.; C. Gad-den Sayre, Archt., 704 Flatiron Bldg., Asheville, and 435 Jefferson Standard Bldg., Greensboro, N. C.*

N. C., Winston-Salem—Pine Hall Brick Co., 241 S. Liberty St., has brick contract for \$500,000. Y. M. C. A.; Harold Macklin, Archt., 420 W. Fourth St.; Sherman W. Dean, Consult. Archt., care Bldg. Bureau, International Comm., Y. M. C. A., 347 Madison Ave., New York; North Eastern Construction Co., Contr., New City Hall, Winston-Salem.*

Okla., Blackwell—City let contract at \$24,897 to L. L. Viers for fire station wing to city hall; brick, reinforced concrete and steel, concrete first floor; H. H. Mahler Co., Archt., 204 1/2 E. Third St., Tulsa.*

Okla., Buffalo—Harper County Board of Commrs. let contract to A. F. Stewart Co. for \$90,000 courthouse; brick, stone, reinforced concrete and struct. steel, 4 stories and basement, 75x58 ft., composition roof, struct. steel; Maurice Jayne, Archt., both First Nat. Bank Bldg., Oklahoma City.*

S. C., Orangeburg—City let contract for \$150,000, fireproof city hall and jail to Joe W. Stout & Co., Sanford, N. C.; 2 stories, about 196x60 ft., cement floors, slag roof; furnishings, equipment, etc., \$15,000; G. Lloyd Preacher & Co., Archts., Wynne-Claughton Bldg., Atlanta, Ga. See Machinery Wanted.*

Tex., Houston—Ingalls Cut Stone Co., Bedford, Ind., has cut stone contract for \$600,000 Harris County jail and criminal courts building; granite to Gulf Granite Co., 2614 Washington Ave.; elevators, American Elevator & Machine Co., Louisville, Ky.; Hedrick

& Gottlieb, Inc., Archts., 2008 Post-Dispatch Bldg., both Houston; Bellows-Macley Construction Co., Contr., Kirby Bldg., Dallas.*

Tex., Montague—Montague County erect reinforced concrete fireproof jail; 2 stories, 28.8x39 ft., concrete floors and foundation, Barrett roof; Smith & Praeger, Archts., Dickson Bldg., Paris; Southern Steel Co., Slaughter Bldg., Dallas, gen. contract at \$34,000.*

Tex., San Antonio—City, I. Ewig, City Engr., let contract at \$60,784 to Dixie Heating & Supply Co., 109-11 Fannin St., Houston, for refrigeration plant at municipal auditorium; M. L. Diver, Engr., Calcasieu Bldg.*

Tex., Shiner—City let contract for city hall and fire station to F. O. Crawford, Yockum; 2 stories, 60x72 ft., brick, concrete and steel; L. L. Harrington & Co., Archts.-Engrs., Builders Exchange Bldg., San Antonio.

Va., Danville—City Council let contracts to Art Metal Co., Richmond, Va., and Monroe Benbrook & Co., 507 S. Dearborn St., Chicago, Ill., for \$500,000 furniture for \$500,000 city hall under construction; Heard & Chesterman, Archts., Peoples Nat. Bank Bldg., Lynchburg, and Mason's Temple Bldg., Danville; Wiley & Wilson, Consult. Engrs., 908 Peoples Nat. Bank Bldg.; Fuqua Construction Co., Contrs., Krise Bldg., both Lynchburg.*

Dwellings

Ala., Birmingham—Chas. F. Debardladden, Pioneer Bldg., erect \$15,000 residence, S. Henrietta and Aberdeen Sts.; 2 stories, 10 rooms, slate roof; L. E. Ford, Contr., 2117 N. First Ave.

Ala., Birmingham—Irby Zeigler, 411 Nineteenth St., Ensley, erect \$15,000 brick and stone veneer residence, 20th and Eufaula Sts., Bush Hills; 1 story and basement, 86x44 ft., composition roof, steam heat; Brooke E. Burnham, Archt., 1921 Age-Herald Bldg.; work started, day labor.

Ala., Ensley—J. F. Holley, 817 Nineteenth St., erect \$10,000 residence, 20th St. and Eufaula Ave.; brick veneer, 2 stories, 8 rooms, composition roof; day labor.

Ark., Fordyce—P. G. Matlock erect 1-story frame residence, W. Fourth St.; I. E. McMurry, Contr.; work started.

Ark., Forrest City—Walter Allen erect 1-story frame residence; John Moore, Contr.

Ark., Fort Smith—J. E. McCubbin, 1504 N. Greenwood St., erect residence, 1504 N. Greenwood Ave.; day labor.

Ark., Hot Springs National Park—J. E. Turner erect dwellings, Second Ave. near South Ave.; wide siding, 1 story, 5 rooms, composition shingle roof, pine floors; total cost about \$10,000; O. M. Harrison, Contr., Sixth and Rector Sts.

Fla., Jacksonville—G. Patterson erect \$32,000 frame and tile building, Ortega Blvd. near Baltic St.; 2 stories; Gude & Co., Contrs., Buckman Bldg.

Fla., Ocala—County Judge L. E. Futch erect 3 bungalows, E. Ocklawaha and Central Sts.; total cost about \$10,000; John K. Ball, Contr.

Fla., St. Petersburg—John Bridwell, 9 Seventh St. N., erect 5 frame dwellings, Bridwell's Shadow Lawn Park; total cost \$110,000; H. E. Walton, Contr.

Ga., Augusta—Mrs. John R. Schneider erect 2-story residence, Greene St.; stucco on metal lath, Celotex; Schoegs & Ewing, Archts.; Branch & Smith, Contrs.; warm air heat, E. A. Demore; electric work, Young Electric Works; millwork, Perkins Manufacturing Co.; plumbing, Elsbroad Plumbing Co.; granite steps, S. R. Kelly & Son.

Ga., Brunswick—Brunswick Terminal and Railway Securities Co., Wm. Phinny, Vice-Pres.-Mgr., let contract for 3 dwellings to John Grundahl Co.; cost \$5000 to \$7500 each; Drummond, McCrary & Drummond, Archts., Marion Bldg., Augusta.*

Ky., Wayland—Elkhorn Coal Co. erecting 40 miners' houses; also erecting store.

La., Logansport—J. O. Page erecting brick residence; 2 stories, 10 rooms.

La., New Orleans—Denecre & Woodward, Louisiana Bldg., wants sub-bids for 2-story frame and stucco dwelling, Palmer Ave. and La Salle Place; slate roof, hardwood floors, warm air heat, copper screens, tile baths.

La., New Orleans—Mrs. H. J. Manzella, 4827 Prytania St., erect 3 double cottages, Gentilly and Crete Sts.; total cost \$12,050; Cooper & Spierier, Contrs.

La., New Orleans—John L. Cahill erect \$12,000 duplex, Upperline and Barrett Sts.; Jos. J. Lagarde, Contr., Canal-Commercial Bank Bldg.

La., New Orleans—Eureka Homestead Society, 451 Camp St., erect \$13,000 building,

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Forshey and Cambronre Sts.; E. R. Slate, Contr., 1812 Port St.

La., New Orleans—Hoffman Heater Co., 750 Baronne St., has heating contract for 2 dwellings for Mrs. Emile Oustalet; electric work, G. Grandmain, 2315 Laharpe St.; plumbing, J. Edw. Magendie, 1700 N. Dorge- nois St.; sheet metal work, John G. Gass- ner, 1817 Rousselin St.; roofing, Alb Brandin Slate and Roofing Co., Inc., 428 N. Rampart St.; Frank & Chas. Hullinghorst, Gen. Contrs.*

Md., Baltimore—Baltim Co. erect \$10,000 frame residence, Lake and Roland Aves.; 2 stories, 50x59 ft., slate roof, hot water heat; H. A. Stillwell, Archt.-Contr., Calvert and Baltimore Sts.

Md., Baltimore—Alex McGill, 10 E. North Ave., erect \$13,000 brick residence and garage, Rugby and Overhill Rds.; 2 stories, 42x39 ft. and 18x20 ft., slate roof, vapor heat; E. A. Wolf, Archt., 829 N. Bentalou St.; H. J. West, Contr.

Md., Baltimore—Milburn Realty Co., 1320 N. Charles St., erect 11 brick dwellings, 26th St. near O'Donnell St.; 2 stories, 24x24 ft., shingle roofs, hot air heat; total cost \$36,000; Chas. T. McClure, Archt., 4415 Pimlico Rd.; owner builds.*

Md., Baltimore—Addie S. Vandevere erect \$15,000 brick residence, Crossland Ave. near Erdman Ave.; 2½ stories, 42x58 ft., slate roof, hot water heat; H. Frantz, Archt.; B. H. B. Ennis, Jr., Contr., Liberty Hts. and Rosedale Aves.

Md., Baltimore—M. Ernest Jenkins, Abell Bldg., erect \$50,000 residence, stone, 2½ stories, 136x34 ft.; Laurence Hall Fowler, Archt., 847 N. Charles St.; L. L. Chambers, Inc., Contr., 36th St. and Roland Ave.

Mo., Clayton, St. Louis—Rae Agatstein, 6253 Southwood Ave., erect \$12,000 dwelling and garage, Clayton St., Moorlands Park; brick, 38x32 ft.; J. Williamson, Contr.

Mo., St. Louis—H. J. Klumpers, 110 N. Eighth St., erect 2 brick dwellings, 4319-23 Marcus St.; 1 story, 27x28 ft., composition shingle roofs, hot air heat; total cost about \$10,000; J. T. Seoenner, Archt., 4707 Farlin St.; Korte Realty and Loan Co., Contrs., 110 N. Eighth.

Mo., St. Louis—Resource Realty Co., Sev- enth and Chestnut Sts., erect 4 brick dwell- ings, 5601-05-07-09 Mimika St.; 1 story, 24x 31 ft., composition roofs, warm air heat; total cost \$12,000; A. H. Rosenthal, Archt.-Contr., 6344 Laura St.

Mo., St. Louis—Carleton B. Fox, 524 Gree- ley St., erecting residence, Park Rd., Webster Park; Parnell Quick, Contr., 24 W. Big Bend.

Mo., St. Louis—W. B. Jarvis started work on modified Spanish type residence, Green- dale, on Normandy Ave. near St. Charles Rock Rd.

Mo., St. Louis—John F. Mathews, 4500 Mc- Pherson St., erect 3 brick dwellings, Green- dale on Normandy Ave. near St. Charles Rock Rd.

N. C., West Durham—Erwin Cotton Mills Co., R. N. Duke, Pres., let contract to Wm. M. Hunt, 1503 Glendale Ave., for plumbing work on 300 dwellings; total cost \$60,000.

N. C., Winston-Salem—C. R. Troutman, 118 N. Marshall St., completed foundations for 2 dwellings, Westwood St.; brick veneer, 1 and 2 stories, 32x49 ft. and 36x26 ft., hard- wood floors, asbestos roofs; total cost about \$15,000; Carl Long, Archt.; L. T. Long & Son, Contrs., both Cloverdale Ave. See Ma- chinery Wanted.*

Tenn., Knoxville—W. A. Hart, Bldr., 703 Market St., started work on \$20,000 English type duplex, Sequoyah Hills; brick veneer, slate roof; Albert E. Gredig, Archt., Mer- cantile Bldg.

Tenn., Memphis—R. T. Martin, care Marx & Bensdorf, 152 Madison Ave., erect 4 dwell- ings, Pope Ave. near Summer St.; brick ve- neer, 5 rooms, composition shingle roof, pine floors, baths, septic tanks; total cost \$12,000; F. C. Story, Contr., 516 Dermon Bldg.

Tenn., Memphis—R. A. Workman, Cotton Exchange Bldg., erect 1-story and basement residence, Colonial Gardens; cost \$10,000, brick veneer, 5 rooms, composition shingle roof, oak floors, tile bath, hot water heat; Foster & Stevenson, Contrs., First Nat. Bank Bldg.

Tex., Houston—R. P. Williams erecting \$10,000 duplex, 1651 Norfolk St.; brick ve- neer, 2 stories, 8 rooms; M. Ducon, Contr.

Tex., Houston—J. H. Pound, 1412 Truxillo St., let contract at \$12,449 to Tavy & Sex- ton, 7024 Avenue E, for residence, 1112 Autrey St.; frame, 2 stories, attic and base- ment, 32x37.6 ft., oak floors, concrete founda- tion, slate composition roof; Jno. W. North- rop, Jr., Archt., West Bldg.; work started. Address Archt.*

Government and State

Fla., Orlando—Hughes Street Arcade, Inc., Hughes St., let contract to Peterson Con- struction Co., Hughes St. Arcade, for \$40,000 building, Hughes St. near Church St., for post office sub-station and 12 stores; brick, 1 story, 80x150 ft., concrete floors, Barrett specification roof; furnishings, equipment, etc., \$7500; D. B. Hyer, Archt., Phillips Bldg.; engineering by Contr.*

Hospitals, Sanitariums, Etc.

Ga., Valdosta—Dr. J. F. Mixon and Dr. F. Bird, Central Ave., will let contract to R. N. McEachern for \$50,000 hospital, Cen- tral Ave. and Stephens St.; hollow tile and stucco, frame interior, 2 stories, L shape, 100x50x75x50 ft., maple and linoleum floors, concrete foundation, tar and gravel roof; furnishings, equipment, etc., \$40,000; Daniel & Beutell, Archts., 308-09 Healey Bldg.; The Markel Co., Engr., Wynne-Claughton Bldg., both Atlanta, Ga. Address equipment propo- sals to Owners.*

Mo., Cape Girardeau—Southeast Missouri Hospital, care M. E. Fleming, Chmn. Finance Comm., let contract for \$140,000 hospital, Sunset Terrace, West Cape Girardeau, to Arthur H. Gerhardt; reinforced concrete, brick, Bedford limestone and steel, 2 stories, 132x42 ft., terrazzo floors, built-up roof, plate and D. S. A. glass, hollow tile, metal bath, iron stairs, vault doors, refrigerator, steam heat; Hoener, Baum & Froese, Archts., 3605 Laclede Ave., St. Louis.*

Okl., Oklahoma City—Wesley Hospital Assn., 300 W. 12th St., let contract for \$250,000 building to W. S. Bellows, Hersk Bldg., for brick and reinforced concrete hospital; heating and plumbing in gen. contract; 4 stories, 90x40 ft., composition roof, fireproof; Hawk & Parr, Archts., Cotton Exchange Bldg.*

Hotels and Apartments

Ala., Birmingham—F. D. Rimer, 4110 Ave- nue T, Ensley, erect \$10,000, 2-story, brick veneer, 16-room apartment house, Princeton Ave., with day labor; composition roof; pri- vate plans.

Ala., Sheffield—Sam Kendall, trustee, re- cently let contract to Walker Bros. Co., Jackson Bldg., Birmingham, for \$100,000, 3-story and half-basement, brick and stone apartment building, Washington Blvd. and Ridge Drive; twelve 3 and 4 room apart- ments, electric stoves and refrigerators, in- a-door beds, tile baths and roof; Harry J. Frahn Co., Archts.*

Fla., Miami—Pueblo Hotel Corp., care Glen H. Curtiss, Hialeah, let contract to St. John Construction Co., 629 N. W. Seventh St., for construction of \$175,000 Pueblo Ho- tel in Country Club Estates; site and fur- nishings cost additional \$100,000; main building 3 stories, with observation tower 5 stories, wings from 1 to 3 stories, first story contain lobby, dining room, dining terrace, kitchen and offices, with 4 shops opening upon an arcade, community library in north wing, second and third floors to have 39 guest rooms each and 2 open loggias will be on third floor, elevators; Collins & Sheffield, Archts., 1015 Exchange Bldg.; V. H. Nellenbogen, Asso. Archt.

Ga., Atlanta—O. T. Hennessee, 49 Juniper St., has started work on \$60,000, 2-story, brick veneer apartment house at 1116-22 Rosedale Drive; 2 sections 42x96 ft. each, oak flooring, brick and reinforced concrete foundation, equipment and furnishings cost \$5000; plans and construction by owner. [See Machinery Wanted—Roofing (Composi- tion); Flooring; Ventilators.]*

Miss., Natchez—J. V. and R. T. Burkes, Contrs., Carondelet Bldg., New Orleans, La., let following sub-contracts on 7-story Eola Hotel: Reinforcing steel, Truscon Steel Co.; Carondelet Bldg.; electrical wiring, Bunn Electric Co., 855 Baronne St.; screens, Schultz Cabinet Works, 2413 N. Galvez St.; finishing hardware, Gibbens & Gordon, Inc., 532 Canal Bldg.; painting, Roy A. Davis; all New Orleans, La.; plumbing, heating and ventilating, Acme Engineering Co., 229 Cochran Pl., Memphis, Tenn.; caulking, Chamberlin Metal Weatherstrip Co., 1644 W. Lafayette St., Detroit, Mich.; structural steel, Ingalls Iron Works Co., 720 Avenue D, Bir- mingham, Ala.; millwork, Enochs Lumber & Mfg. Co., S. State St., Jackson, Miss.; ele- vator doors, sills, tinclad doors, etc., Coburn Trolley Track Mfg. Co., Holyoke, Mass.; ornamental and miscellaneous iron, R. C. Lieb Co., 340 Whitehall St., Atlanta, Ga.; roofing and sheet metal work; Burkett Sheet Metal Works, 111 Newman St., Hattiesburg, Miss.; cast stone, White Stone Co., 468 Mc- Lenore St., Memphis, Tenn.; steel sash, Truscon Steel Co., Youngstown, Ohio.*

Mo., St. Louis—Heston Investment Co.,

6819 Raymond St., erect \$12,500, 26x55 ft., 2-story, brick tenement, 4980 Potomac St.; tile roof, steam heat; J. D. Hesse & Sons, Archts.-Builders, 6819 Raymond St.*

Mo., St. Louis—May Building & Investment Co., 808 Chestnut St., erect two 23x43 ft., brick tenements, 5010-12 Northland St.; \$16,000, asphalt shingle roofs, steam heat; own- ers build.

Mo., St. Louis—H. W. Simon, 4569 Athlone St., erect \$11,000, 2-story, 54x48-ft. brick tenement, 4311-15 College St.; tar and gravel roof, hot air heat; H. C. Simon, Archt.-Builder, 4446 Floriss Place.

Mo., St. Louis—Frances-Ralph Realty Co., 933 Arcade Bldg., has permit for \$400,000, 14-story, brick, 96x95 apartment hotel, 3733-7 Lindell Blvd.; composition roof, vacuum heat; Pleitsch & Price, Archts., 1594 Arcade Bldg.; W. H. Smith-Nelson Cunliff Co., Contrs., 710 N. Seventh St.

Mo., St. Louis—H. Schaefer, 4451 Beetho- ven St., erect \$18,000, 2-story, 46x31-ft., brick tenement, 4457 Pennsylvania and 3009 Dakota St.; gravel roof, hot air heat; E. E. Christopher, Archt.; owner builds.

Tenn., Knoxville—Otis Elevator Co., 29 E. Harris St., Atlanta, Ga., will install 1 freight and 3 passenger elevators in \$1,000,000 Ten- nessee Terrace Hotel, now under construc- tion; Worsham Brothers, Contrs., Empire Bldg.*

Tex., Abilene—Abilene Hotel Co. erecting 9-story and basement, reinforced concrete hotel building; cost \$350,000, not including heating, plumbing, etc.; basement to con- tain laundry, boiler room, storage rooms, help's locker rooms and public toilets; first story contain 7 stores, coffee shop, main lobby, kitchen, etc.; banquet hall, ladies' and men's lounges on mezzanine floor; 222 guest rooms on floors above; 1 freight and 2 passenger elevators; Robert E. McKee, Gen. Contr., 1900-32 Texas St., Box 367, El Paso, let following sub-contracts: Common brick, Abilene Pressed Brick Co.; Fort Scott hydraulic cement, West Texas Build- ers' Supply Co.; crushed rock, Bontke Bros.; draying and hauling, J. D. Moore; lumber, Jennings Lumber Co.; electrical work, Sun Electric Co., all Abilene; hollow clay tile, El Paso Brick Co.; Portland ce- ment, S. W. Portland Cement Co., both El Paso; gypsum blocks and plaster, Certain- ted Products Corp., 1213 N. Main St., Hous- ton; concrete, brick and plastering sand, T. C. Moore, Chillicothe, Texas, or Texas Colorado Sand & Gravel Co.; granite, Cold Spring Granite Co., Cold Spring, Minn.; terra cotta, Kansas City Terra Cotta & Faience Co., 19th and Manchester Sta., Kan- sas City, Mo.; marble work, Arnansti Marble & Carthage, Mo.; hollow metal windows and kalamen doors, L. S. Pinkston, Jr., Athletic Bldg.; plate glass, copper setting and mirrors, Federal Glass & Paint Co., 2001 N. Lamar St.; reinforcing steel, Masher Steel & Iron Works; terrazzo and tile work, W. A. Jacobie Co., 503 N. Market St.; metal lath and pans, Truscon Steel Co., 115 Field St., all Dallas; millwork, Austin Sash & Door Co., 11 E. Sixth St., Austin; heating, plumbing and ventilation, S. P. Osburn, 1900 Fifth Ave.; placing reinforcing steel, Han- kins Bros., both Fort Worth; David S. Cas- tle Co., Archts., Abilene.*

Tex., Amarillo—C. S. Lambie, Contr., 300 Blackburn Bldg., let following sub-contracts on \$100,000 hotel building for J. W. Ross, 1807 Prince St.; millwork, McPhee & Mc- Guinity, Denver, Colo.; reinforced steel, Con- crete Engineering Co., Athletic Bldg., Dal- las; terrazzo, D'Agnoli-Janehettin Co., Ama- rillo; tile, Vernon Williams Co., Amarillo.*

Tex., Beaumont—J. W. Heartfield awarded contract at \$20,589 for construction of 2-story, 20-room, brick veneer apartment house; F. W. Steinman & Son, Archts., 411 San Jacinto Life Bldg.

Tex., Electra—Reuben R. Cook, Pres. of First Natl. Bank, rebuilding and repairing second story of Marriott Hotel, 111 S. Wichita St., recently burned.*

Tex., Houston—L. L. James, 1410 W. Clay St., is erecting \$12,000, 2-story, 4-apartment house at Autrey and Graustark Sts.; 6 rooms each; F. S. Young, Contr., Cotton Exchange Bldg.

Tex., Houston—F. S. Price, Contr., 433 Hall Place, erecting two duplex brick veneer apartments at Banks and Mt. Vernon Sts. and 2 at Autrey and Mt. Vernon Sts.; \$15,000 each; 2 stories, 6 rooms each.

Tex., Mineral Wells—Mineral Wells Hotel Co., care A. E. Eaton, approved preliminary plans on \$1,000,000, 8-story, 250-room, brick, stone, reinforced concrete, fireproof hotel building; Wyatt C. Hedrick, Archt., 1005 First Nat'l Bank Bldg., Fort Worth; contract reported let to Inge & Burgher, Contrs., 2013 Republic Bank Bldg., Dallas.*

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Tex., San Antonio—Wood Properties Corp., H. C. Wood, Pres., 903 Travis Bldg., acquired 56 additional ft. of Martin St. frontage for 1-story store structure as part of projected \$650,000, 15-story hotel at corner Martin and Navarro Sts.; to be constructed to carry 14 additional stories; W. E. Simpson Co., Engr., Nat'l Bank of Commerce Bldg.; plans and construction by Kelwood Co., Archt. and Constr. Engr., 903 Travis Bldg.*

Miscellaneous

La., New Orleans—Gitz & Geier, 7817 Pearl St., Contrs. for amusement building at Friscoville Ave. and N. Peters St. for Jai-Alai Club, let following sub-contracts: Interior decorations, George Kerner, 7828 Pearl St.; hardware, Harry's Hardware Co., 326 S. Rampart St.; heating system, Thomas P. Hadley, 342 S. Broad St.; plastering, P. Bauduit; plumbing, Thomas P. Hadley, 342 S. Broad St.; sheet metal work, Holzer Sheet Metal Works, Inc., 317-31 Burgundy St.; brick work, J. C. Campbell; flooring, W. J. Healey, 222 Perdido St.; glazing, P. Brand, 1331 Second St.; lumber, St. Bernard Lumber Co.; millwork, Lower Coast Mfg. Co., 1072 Farragut St., Algiers, La.; painting, J. J. Reiff, 2921 Chippewa St.*

Miss., Long Beach—Sisters of Charity erecting 2-story stucco home on grounds of St. Thomas' Catholic Church, Rev. J. M. Hager; R. O. Weber, Contr.

Railway Stations, Sheds, Etc.

Ala., Opp—Louisville & Nashville Railway Co., W. H. Courtney, Ch. Engr., 1110 Third St., Louisville, Ky., started work on \$27,000 depot; Opp Building & Supply Co., T. P. Winston, Contrs.

Ga., Savannah—Seaboard Air Line Ry Co., W. D. Faucette, Ch. Engr., Realty Bldg., let contract to Elliott Building Co., Hickory, for \$17,000, 1-story, 21.4x57.10 ft. passenger station in West Savannah; frame and stucco construction with 300-ft. butterfly shed on cast iron columns, concrete and wood floors, concrete foundation, tile and built-up roof, equipment and furnishings cost \$400; plans by J. C. Williams, Engr. of Buildings, Realty Bldg.*

Schools

Ala., Huntsville—Earl Cline, Contr., Box 621, let following sub-contracts on \$180,000 high school at Randolph and Eustis Sts., for Board of Education, Dr. J. D. Humphrey, Pres.: Tile, Vulcan Tile & Brick Co., 2103 N. First Ave.; reinforcing steel, Concrete Steel Co., 1009 Avenue E, both Birmingham; plumbing, heating and electric wiring to the Hutchins Co.; R. H. Hunt & Co., Archts., 1223-25 James Bldg., Chattanooga, Tenn.*

Fla., Gainesville—State Board of Control, P. K. Yonge, Chmn., Aragon Hotel, Jacksonville, let contract to D. F. Douglas Co., New Smyrna, at \$118,200, for construction of Horticultural Building at University of Florida; Rudolph Weaver, Archt.

Fla., Tampa—McGucken & McGucken, Contrs., 204 Governor St., let following sub-contracts on \$382,500 Henry Plant High School in Palma Cella Park: M. H. Greeson, 202 S. Willow St., steam heating and plumbing; Bell Electric Co., electrical work; Progressive Painting Co., Packwood and Horatio Sts., painting, all Tampa; Selden Cypress Door Co., Palatka, millwork; Decatur Iron & Steel Co., Albany, Ala., iron and steel. (See Machinery Wanted—Vault Doors; Blackboards; Cork Boards; Store Fronts)*

Ga., Commerce—School Board erecting new high school auditorium.

Ky., Lexington—J. T. Jackson Lumber Co., Price Ave. and Belt R. R., let following sub-contracts on \$400,000 high school building: Concrete work, F. T. Justice & Co., W. Fourth St.; steel and iron work, Snead Architectural Iron Works, Tenth and Hill Sts., Louisville.*

La., Baton Rouge—State of Louisiana let following contracts for work at State School for the Deaf: Heating, Bracher & Rambach, 227 Laurel St., \$17,700; tank and tower,

Chicago Bridge & Iron Works, 37 W. Van Buren St., Chicago, Ill., \$7800; automatic water sprinklers, H. N. Moody, 815 Perdido St., New Orleans, \$10,999; William T. Nolan, Archt., Canal-Commercial Bldg., New Orleans.*

La., Lecompte—Rapides Parish Board of Education, W. J. Avery, Supt., Alexandria, let contract to R. M. Odom at about \$15,000 for construction of 1-story frame negro school building; C. Scott Yeager, Archt., Alexandria.

N. C., Rocky Mount—D. J. Rose & Son, Contrs., let following sub-contracts on \$162,000 High School building; steel, Richmond Structural Steel Co., 17th St. and Dock, Richmond, Va.; miscellaneous iron work, Dewey Brothers, Goldsboro, N. C.; millwork, Builders Sash & Door Co., Rocky Mount.*

Tenn., Nashville—Fisk University let contract to McKissick & McKissick, Morris Memorial Bldg., at \$10,500 for repairs to chapel, 17th Ave. North.

Tex., Austin—Board of Regents of University of Texas recommended contract be let to J. L. Strassel Co. at \$56,636 for furnishings for Littlefield dormitory.*

Tex., Edinburg—Alamo Steel and Supply Co., Spring and Taylor Sts., Houston, received contract for reinforcing steel for science building, for Edinburg Independent School District, M. M. McIlhenny, Pres.; Giesecke & Harris, Archts., 207 W. 7th St., Austin.*

Stores

Ala., Bessemer—John Farrandella, 431 19th St., erecting 1-story, brick, 3-unit store building at 19th St. and Eighth Ave.; private plans; owner builds with day labor.

Ala., Birmingham—A. M. Goldberg, 1230 N. 32nd St., let contract to Mackle-Shepherd Co., 910 N. 19th St., for store and residence remodeling at Tuscaloosa Ave. and Hawkins St.; store 1-story brick, 50x70 ft., built-up roof, concrete floors, plate-glass fronts; remodel 2-story frame residence into 2 apartments; private plans.

Ala., Birmingham—Sam Spina, 2206 Ensley Ave., Ensley, erecting \$20,000, brick, 14-room store and office building, 20th St. and Tuxedo Junction; concrete and wood floors, built-up tar and gravel roof; private plans; J. F. Culpepper & Son, Contrs., 2515 Avenue D, Ensley.

Ark., El Dorado—Mrs. Lena C. Goodwin let contract to E. G. Horton for \$20,000, 1-story, brick, 75x92 ft. stores building, 205 W. Main St.; plate-glass fronts, built-up roof, wood and concrete floors; Charles L. Thompson, Archt., 506 Home Insurance Bldg., Little Rock.*

Ark., El Dorado—E. G. Trull let contract to Home Lumber Co. for \$10,000, 1-story, 42x90 ft. brick store building, 212 N. Washington Ave.; built-up roof, plate glass.*

Fla., Delray—Abraham George erecting 1-story brick and tile business block, S. E. cor. Atlantic Ave. and Southeast Fourth St.

Fla., Jacksonville—Brown Realty Co. erect \$27,500, 1-story, brick building, Montgomery Place between St. Johns and river, for B. K. Hall.

Ga., Atlanta—Massell Realty Co., 43½ Peachtree St., erecting \$60,000, 1-story, brick store and factory, corner Boulevard and Forrest Ave., with day labor; 120x225 ft., cement floors, stone foundation, cork and gravel roof; E. C. Seiz, Archt., 43 Peachtree St.; address equipment proposals to Trinity Quality Shop, Inc., Edgewood Ave. (See Machinery Wanted—Hollow Tile; Metal Doors, Sash and Trim; Wire Glass; Roofing (Composition); Sprinklers; Terra Cotta Trim.)*

Ga., Valdosta—Dunaway & Poole have contract for remodeling Converse Bldg., Hill Ave. and Ashley St.; \$10,000 to \$15,000.

La., Bastrop—F. L. Rowe erecting \$12,000, 2-story, 23x80 ft. business building on N. Washington St.

La., Hammond—Sam Demarco let contract to Albert Tolle for construction of brick business building.

La., Oil City—Pine Island Mercantile Co. let contract to Lee Quillin, Texarkana, Ark., Tex., for \$11,000, 1-story, brick store build-

ing; Seymour Van Os, Archt., 1213 City Bank Bldg., Shreveport.*

Mo., Kansas City—R. Crosby Kemper, 805 W. 61st St., and W. O. Norman, 18th and McGee Sts., started work on 2-story, \$50,000, 4-storeroom and office building, 1324-30 Oak St.; terra cotta and brick front.

N. C., Hendersonville—R. Skalowski will replace 2 buildings on Main St. and Fourth Ave. with new structures to contain 3 store compartments; K. G. Justus & Son, Contrs.

Tenn., Memphis—S. C. Toof & Co., 195 Madison St., let contract to F. J. Ozanne & Co., Empire Bldg., for 140x72 ft., 1-story addition to commercial building, 195 Madison Ave.; E. L. Harrison, Archt., 1501 Fidelity Bank Bldg.

Tex., Amarillo—G. C. Ledford, 1710 Taylor St., let contract to Ledford & Tucker, Panhandle Bldg., for construction of 1-story, 32x80 ft., brick, steel store building; C. F. Ward & Co., Archts., 45 Smith Bldg.

Tex., Bastrop—W. H. Blane awarded general contract at \$15,000 for 2-story, 32x102-ft. brick and concrete business building.

Tex., Beaumont—J. Cooke Wilson, 319 Wilson Bldg., let contract to C. F. Myers, 435 Keith Bldg., at \$65,778 for construction of 3-story and mazzanine, 60x100-ft. business building; tar and gravel roof, 1 elevator; A. Babin, Archt., 15 Blanchette Bldg.*

Tex., Houston—W. T. Carter, Jr., Courtland Place, will erect \$65,000, 125x125 ft., brick, 2-story building, Austin and Clay Sts., for Texas Hotel Supply Co.; plans and construction by G. C. Street Construction Co., National and Center Sts.

Tex., McAllen—E. M. Frisby let contract to Vivrett & Vivrett, Harlingen, for \$20,000, 2-story, brick and frame business building; Stanley W. Bliss, Archt., Harlingen.*

Tex., Wichita Falls—Naylor-Collins Co., 3000 Grant St., received contract at \$11,080 for construction of 2-story, 49x150-ft. brick and frame business building; Voeleker & Dixon, Archts., Kahn Bldg.*

Theaters

La., New Orleans—Saenger Theaters, Inc., care M. H. Jacobs, 1401 Tulane St., let contract to Richard McCarthy, Canal Bank & Trust Co. Bldg., for rebuilding Prytania Theater, Prytania and Leontine Sts., destroyed by fire; \$22,000; Emile Weil, Inc., Archt., Whitney Bldg.*

N. C., Mocksville—C. B. Mooney, Contr., started work on 25x90-ft. theater building on N. Main St. for J. A. Daniel; 2 stories in front, seating capacity 350.

Okla., Ponca City—T. J. Myatt erecting \$35,000 motion picture theater on W. Grand Ave.

Va., Danville—A. C. Conway, 218 W. Main St., let contract to Fuqua Construction Co., Krise Bldg., Lynchburg, for construction of building on site of Bijou Theater; cost \$130,000 to \$140,000, seating capacity of 1000 persons; 2-story elevation on Main St. with 11 suites of offices; to be operated by Southern Amusement Co.*

Warehouses

Fla., Jacksonville—M. A. Wales erect \$40,000, 1-story, brick and tile warehouse, 14th, between Liberty and Walnut Sts., for F. B. Martindale, E. 14th St.

La., New Orleans—Equitable Equipment Co., Whitney Bldg., has let contract to W. Horace Williams Co., 816 Howard Ave., for \$10,000, 1-story warehouse on Elysian Fields and Florida Walk.

Tex., Cisco—West Texas Utilities Co., Abilene, will construct \$50,000, 1-story, brick, concrete and stucco warehouse and office building; Adams & Adams, Archts., Builders Exchange Bldg., San Antonio; owners build.

Tex., Fort Worth—Ellison Furniture Co., 211 W. Seventh St., let contract to Southwell & Abbott, 605 E. Second St., at about \$60,000 for construction of 2-story, 84x100-ft., brick, stone and mill warehouse addition; W. G. Clarkson & Co., Archts., 610 First Nat'l Bank Bldg.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Air Compressors.—See Quarry Equipment.
Air-Cooling Equipment.—K. C. Ferguson, M. D., Pres. of Eastland Mineral Water Co., 204 Exchange Bank Bldg., Eastland, Tex.—Wants prices on air-cooling equipment.

Angles.—Guyan Machine Shops, Logan, W. Va.—Wants angles up to 8x8x½.

Automobile Ambulances.—U. S. Veterans

Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 22 for automobile ambulances, to be furnished as may be ordered during period ending June 30, 1927.

Bags.—United Talc & Crayon Co., J. S. Holland, Sec., Glendon, N. C.—Wants prices on bags for packing talc.

Barrel Stave Machinery.—Inman Builders'

Supply Co., Inman, S. C.—Wants to purchase barrel stave machinery, new or reconditioned.

Bathtubs, etc.—K. C. Ferguson, M. D., Pres. of Eastland Mineral Water Co., 204 Exchange Bank Bldg., Eastland, Tex.—Wants prices on bathtubs, shower baths, etc.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Belting.—Missouri Tool & Equipment Co., 831 N. Eighth St., St. Louis, Mo.—Wants to represent manufacturers of belting.

Bicycle Parts.—George L. Allen, 1303 Third St., Alexandria, La.—Wants data and prices on bicycle parts; correspond with manufacturers.

Blackboards.—McGucken & McGucken, Contrs., 204 Governor St., Tampa, Fla.—Wants sub-contract bids on blackboards for \$382,500 Henry Plant High School.

Boilers.—Machinery Record, Box 733, Richmond, Va.—Wants three 200 h.p. Scotch boilers; one 120 h.p. Scotch boiler not over 7 ft. outside diam., 100 lbs. pressure; must be modern, lightly used; immediate delivery; one 15 hp. locomotive type boiler, open bottom water front.

Boiler and Engine.—Machinery Record, Box 753, Richmond, Va.—Wants 50 h.p. portable boiler and engine on steel wheels.

Bottling Equipment.—K. C. Ferguson, M. D., Pres. Eastland Mineral Water Co., 204 Exchange Bank Bldg., Eastland, Tex.—Wants prices on bottling equipment.

Boxes.—United Tale & Crayon Co., J. S. Holland, Sec., Glendon, N. C.—Wants prices on boxes for packing soap stone pencils.

Brass and Copper Sheets.—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 13 for approximately 450 lbs. brass sheets, and 320 lbs. copper sheets.

Bridge.—State of Texas. See Construction News—Roads, Streets, Paving.

Bridge.—Pensacola, Fla. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—Jefferson City, Mo., will build 3 bridges. See Construction News—Bridges, Culverts, Viaducts.

Bridge.—State of Missouri will build and improve 18 bridges. See Construction News—Roads, Streets, Paving.

Bridge Substructure.—Fayetteville, W. Va. See Construction News—Bridges, Culverts, Viaducts.

Brooders, etc.—The Superior Hatchery, Box 152, Drexel, Mo.—Wants prices on brooders and chicken boxes.

Broom-Making Machinery.—Dorrity & Co., Newberry, S. C.—Want to correspond with manufacturer of machinery for making brooms.

Brushes.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 22 to furnish brushes; delivery Philadelphia, Pa., Sch. No. 307.

Building Material.—James Stewart & Co., Inc., 507-09 Evans Bldg., Washington, D. C.—Wants estimate, including alternates, until Dec. 27, on all lines for \$350,000 alterations to White House; plans from Washington and New York offices.

Canning Machinery, etc.—A. Erskine Miller, Staunton, Va.—Wants data and prices on machinery for canning apples, making apple butter, apple sauce, jellies, etc.; correspond with manufacturers.

Canning Machinery, etc.—J. F. Keeley, 130 Pineapple Ave., Sarasota, Fla.—Wants data and prices on machinery for canning fruits, vegetables, fish, citrus peel, etc.; capacity of plant 100 to 150 cases daily.

Cans.—Jasper Ice and Cold Storage Co., M. M. Gay, Pres., Jasper, Fla.—Wants prices on cans.

Cars.—Marlbrook Lime Co., First Natl. Bank Bldg., Roanoke, Va.—Wants 10 Western 1½-yd. 24-in. gauge cars.

Cast Stone.—J. Frank Collins, 703 Andrews-Law Bldg., Spartanburg, S. C.—Wants prices on cast stone for \$115,000 Sunday school.

Cast Stone.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on cast stone for \$1,000,000 senior high school.

Cast Stone.—W. W. Kenworthy, 631 Bankers Mortgage Bldg., Houston, Tex.—Wants prices on cast stone for dwelling.

Cast Stone.—A. C. McMillin, 609 Poplar Ave., Clarendon, Va.—Wants prices on cast stone for dwelling.

Cast Stone.—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on cast stone for \$260,000 court house and jail, Lafayette, La.

Cast Stone.—Jos. W. Northrop, Jr., West Bldg., Houston, Tex.—Wants prices on cast stone for \$26,000 dwelling.

Cast Stone.—Sutton & Routt, Morse Arcade, Hollywood, Fla.—Wants prices on cast stone for church, Fort Lauderdale, Fla.

Celotex.—John Stafford White, Archt.,

Milton, Fla.—Wants prices on Celotex for \$100,000 Floridale Hotel.

Compressor.—Jasper Ice and Cold Storage Co., M. M. Gay, Pres., Jasper, Fla.—Wants prices on compressor for 10-ton capacity ice plant.

Compressors.—See Quarry Equipment.

Concentrators.—K. C. Ferguson, M. D., Pres. of Eastland Mineral Water Co., 204 Exchange Bank Bldg., Eastland, Tex.—Wants prices on concentrators.

Condensers, Coils, etc.—Jasper Ice and Cold Storage Co., M. M. Gay, Pres., Jasper, Fla.—Wants prices on condenser, coils, etc., for 10-ton capacity ice plant.

Conveyors.—See Quarry Equipment.

Cork Boards.—McGucken & McGucken Contrs., 204 Governor St., Tampa, Fla.—Want sub-contract bids on cork boards for tack boards for \$382,500 Henry Plant High School.

Crane.—Box 410, Birmingham, Ala.—Wants one 5-ton and one 10-ton second-hand overhead cranes, preferably for 80-ft. runway; must be in first-class condition; give full description and price.

Crusher (Jaw).—Machinery Record, Box 733, Richmond, Va.—Wants one 36x43 or larger jaw crusher complete.

Crusher (Jaw).—Henry Lewis & Co., Engrs., Commercial Trust Bldg., Philadelphia, Pa.—Wants 36x42 or slightly larger jaw crusher.

Crushers.—See Quarry Equipment.

Crusher.—Marlbrook Lime Co., First Natl. Bank Bldg., Roanoke, Va.—Wants one gyratory crusher, size 4 or 5.

Derrick (Stiffleg).—L. J. Breed Equipment Co., 811 James Bldg., Chattanooga, Tenn.—Wants one 5-ton stiffleg derrick, with 40-ft. boom, 25 or 30 ft. mast and 10-ft. bull wheel; quote price and give full information; Tennessee delivery.

Dredge.—Boca Chica Beach, Inc., Ewing D. Clark, Sec., Weslaco, Tex.—Wants dragline dredge and suction dredge for development of 100-acre beach resort.

Dumb Waiters.—Ivey & Crook, Archts., Candler Bldg., Atlanta, Ga.—Wants prices on dumb waiters for 5-story Chemistry Building at Emory University.

Dumb Waiters.—R. S. McCook, Archt., Lake Charles, La.—Wants prices on dumb waiters for \$625,000 hotel.

Dump Cars and Track.—See Quarry Equipment.

Dyes (Leather).—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 8 for 1824 bottles leather dye, various colors.

Electric Fixtures, etc.—Reeler & Co., 67 W. Lexington St., Asheville, N. C.—Wants sub-bids on electric wiring, including fixtures, for \$33,000 golf clubhouse.

Electric Light Cabinets.—K. C. Ferguson, M. D., Pres. of Eastland Mineral Water Co., 204 Exchange Bank Bldg., Eastland, Tex.—Wants prices on electric light cabinets.

Electric Pumps (Domestic).—Hardie Nokol Co., Box 804, Greensboro, N. C.—Wants data on domestic electric pumps and kindred lines to go with oil-burning business.

Electric Refrigerators.—R. S. McCook, Archt., Lake Charles, La.—Wants prices on electric refrigerators for \$625,000 hotel.

Electric Refrigerators.—John Stafford White, Archt., Milton, Fla.—Wants prices on electric refrigerators.

Electric Refrigerators.—Jos. W. Northrop, Jr., West Bldg., Houston, Tex.—Wants prices on electric refrigerators for \$26,000 dwelling.

Electric Refrigerators.—O. Bryan Watson, Piedmont Rd., Atlanta, Ga.—Wants prices on electric refrigerators for dwelling.

Electrical Equipment.—C. M. Guest & Son, N. McDuffie St., Anderson, S. C.—Wants electrical equipment for water works system at Kernersville, N. C.

Elevator (Belt Bucket).—Machinery Record, Box 733, Richmond, Va.—Wants one new or slightly used belt bucket elevator, 24-in. buckets, number 12 gauge steel, 70 ft., center to center.

Emery Stand.—T. O. Rollins, Dalton, Ga.—Wants used 1½ h.p. direct-connected motor-driven emery stand.

Engine.—See Boiler and Engine.

Fertilizer Plant Equipment.—American Fertilizer & Chemical Works, Thos. F. Hawkins, Pres., Georgetown, Tex.—Wants prices on installation of complete fertilizer plant, manufacturing by what is known as "dry process."

Filling Station Equipment.—E. C. D'Yarmett & Herndon, Room E, New York Life Bldg., Kansas City, Mo.—Wants filling station equipment.

Filter Plant Equipment.—C. M. Guest & Son, N. McDuffie St., Anderson, S. C.—Want filter plant equipment for complete water works plant at Kernersville, N. C.

Fire Alarm System, etc.—U. S. Veterans Bureau, Room 791, Arlington Bldg., Washington, D. C.—Receives bids Dec. 28 to furnish and install nurses' call buzzers and fire alarm system in U. S. V. Hospital No. 37, Waukesha, Wis.

Flooring.—C. R. Troutman, 118 N. Marshall St., Winston-Salem, N. C.—Wants prices on tile, terrazzo and hardwood flooring for 2 dwellings.

Flooring (Hardwood).—Rev. A. J. Bradshaw, Pastor, First Christian Church, El Dorado, Ark.—Wants prices on hardwood flooring for \$30,000 church.

Flooring.—O. Bryan Watson, Piedmont Rd., Atlanta, Ga.—Wants prices on hardwood and linoleum flooring for \$8000 dwelling.

Flooring.—J. Frank Collins, 703 Andrews-Law Bldg., Spartanburg, S. C.—Wants prices on tile, terrazzo and hardwood flooring for \$115,000 Sunday school.

Flooring.—E. W. Kenworthy, 631 Bankers Mortgage Bldg., Houston, Tex.—Wants prices on terrazzo and rubber tile flooring for dwelling.

Flooring.—A. C. McMillin, 609 Poplar Ave., Clarendon, Va.—Wants prices on tile and hardwood flooring for dwelling.

Flooring.—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on tile, terrazzo and rubber tile flooring for \$260,000 court house and jail, Lafayette, La.

Flooring.—Jos. W. Northrop, Jr., West Bldg., Houston, Tex.—Wants prices on tile, hardwood and linoleum flooring for dwellings.

Flooring.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on tile, terrazzo, concrete, linoleum and yellow pine hardwood flooring for \$1,000,000 Senior High School.

Flooring (Terrazzo).—Joe W. Stout & Co., Sanford, N. C.—Wants prices on terrazzo flooring for \$150,000 city hall and jail building, Orangeburg, S. C.

Flooring (Hardwood).—C. W. Bell, care Atlas Rock Co., 300 S. W. North River Drive, Miami, Fla.—Wants prices on hardwood flooring for \$10,000 office building.

Flooring.—O. T. Hennessee, Owner-Builders, 49 Juniper St., Atlanta, Ga.—Wants prices on tile and hardwood flooring for \$60,000 apartment house.

Flooring.—R. S. McCook, Archt., Frank Bldg., Lake Charles, La.—Wants prices on tile, terrazzo, linoleum and rubber tile flooring for \$625,000 hotel.

Flooring.—John Stafford White, Archt., Milton, Fla.—Wants prices on tile, hardwood and linoleum flooring for \$100,000 Floridale Hotel.

Forge Blowers.—Guyan Machine Shops, Logan, W. Va.—Wants forge blowers for 110 and 120 volts, A. C.

Gasoline, Kerosene, etc.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 17 to furnish and deliver gasoline, kerosene and fuel oil. Sch. No. 313.

Generator (Electric).—Hackley Morrison Co. (Mech. Dealer), 1708 Lewis St., Richmond, Va.—Wants 5-10 kw., 220 volt generator, belted.

Glass (Window and Bottle).—Francis Silvia, 518 Fort St., Pensacola, Fla.—Wants to correspond with manufacturers of both bottle and window glass in the South.

Grading.—Richmond, Va. See Construction News—Roads, Streets, Paving.

Gravel.—Jennings, La. See Construction News—Roads, Streets, Paving.

Gravel.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 8 to furnish 300 cu. yds. gravel; delivery Quantico, Va. Sch. No. 303.

Grinding Machinery.—See Quarry Equipment.

Hack Saw.—Missouri Tool and Equipment Co., 831 N. Eighth St., St. Louis, Mo.—Wants to represent manufacturers of hacksaws.

Heat Control Valves.—E. C. D'Yarmett & Herndon, Room E, New York Life Bldg., Kansas City, Mo.—Wants heat control valves for number of small refineries.

Heating Plant.—K. C. Ferguson, M. D., Pres. of Eastland Mineral Water Co., 204

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Exchange Bank Bldg., Eastland, Tex.—Wants prices on heating plant for bath-house and clinic building.

Heating System.—O. Bryan Watson, Piedmont Rd., Atlanta, Ga.—Wants prices on 2-pipe steam vacuum trap heating system for \$8000 dwelling.

Heat Insulation.—E. C. D'Yarmett & Herndon, Room E, New York Life Building, Kansas City, Mo.—Wants heat insulation for number of small refineries.

Hoists.—Guyan Machine Shop, Logan, W. Va.—Wants 2 to 3 ton capacity A. C. hoists.

Hollow Tile.—Ivey & Crook, Archts., Candler Bldg., Atlanta, Ga.—Wants prices on hollow tile for 5-story Chemistry Building at Emory University.

Hollow Tile.—E. C. Seiz, Archt., 43 Peachtree St., Atlanta, Ga.—Wants prices on hollow tile for \$60,000 store and factory.

Ice Tank.—Jasper Ice and Cold Storage Co., M. M. Gay, Jasper, Fla.—Wants prices on ice tank.

Inclinerators.—C. R. Troutman, 118 N. Marshall St., Winston-Salem, N. C.—Wants prices on inclinerators for 2 dwellings.

Inclinerators.—Jos. W. Northrop, Jr., West Bldg., Houston, Tex.—Wants prices on inclinerators for \$26,000 dwelling.

Inclinerators.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on inclinerators for \$1,000,000 Senior High School.

Jewelry Manufacturers.—A. J. Dunning, Jr., 16 Arcade Bldg., Norfolk, Va.—Wants to contract for manufacturers of small pin, recently patented.

Laboratory Equipment.—E. C. D'Yarmett & Herndon, Room E, New York Life Bldg., Kansas City Mo.—Wants laboratory equipment for number of small refineries.

Lawn Mowers.—George L. Allen, 1303 Third St., Alexandria, La.—Wants data and prices on parts for all makes of lawn mowers; correspond with manufacturers.

Lathe.—Guyan Machine Shops, Logan, W. Va.—Wants lathe, about 36x14 in., preferably with single-pulley drive.

Limestone.—Joe W. Stout & Co., Sanford, N. C.—Wants prices on limestone for \$150,000 city hall and jail building, Orangeburg, S. C.

Limestone.—Beeler & Co., 67 W. Lexington St., Asheville, N. C.—Wants sub-bids on furnishing limestone for \$33,000 golf clubhouse.

Locomotive.—Henry Levis & Co., Engr., Commercial Trust Bldg., Philadelphia, Pa.—Wants 30 to 40 ton, standard gauge, saddle tank locomotive with A. S. M. E. boiler.

Locomotives.—Machinery Record, Box 733, Richmond, Va.—Wants two 60-ton rod locomotives; also one 20-ton saddle tank locomotive, standard gauge.

Mail Chutes.—C. R. Troutman, 118 N. Marshall St., Winston-Salem, N. C.—Wants prices on mail chutes for 2 dwellings.

Mail Chutes.—R. S. McCook, Archt., Lake Charles, La.—Wants prices on mail chutes for \$625,000 hotel.

Marble.—Ivey & Crook, Archts., Candler Bldg., Atlanta, Ga.—Wants prices on marble for 5-story Chemistry Building at Emory University.

Marble.—A. C. McMillin, 609 Poplar Ave., Clarendon, Va.—Wants prices on marble for dwelling.

Marble.—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on marble for \$260,000 court house and jail, Lafayette, La.

Marble.—R. S. McCook, Archt., Lake Charles, La.—Wants prices on marble for \$625,000 hotel.

Mattress-Making Machinery.—Dorrity & Co., Newberry, S. C.—Wants to correspond with manufacturers of machinery for making mattresses.

Metal Ceilings.—Rev. A. J. Bradshaw, Pastor, First Christian Church, El Dorado, Ark.—Wants prices on metal ceilings for \$30,000 church.

Metal Doors.—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on metal doors for \$260,000 court house and jail, Lafayette, La.

Metal Doors.—Joe W. Stout & Co., Sanford, N. C.—Wants prices on metal doors for \$150,000 city hall and jail building, Orangeburg, S. C.

Metal Doors, Sash and Trim.—E. C. Seiz, Archt., 43 Peachtree St., Atlanta, Ga.—Wants prices on metal doors and steel sash and trim for \$60,000 store and factory.

Milling Saw.—Guyan Machine Shops, Lo-

gan, W. Va.—Wants milling saw, capacity 9 in. round.

Mimeograph Machine.—Carl Wernicke, Sec. Pine Institute of America, Inc., Gull Point, Fla.—Wants mimeograph and duplicating machine, immediate purchase; correspond with manufacturers.

Mirrors.—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 18 for 200 wall mirrors, 12½x19½ in.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington D. C.—Receives bids Dec. 20 to furnish steel; iron or steel pipe; chain; bolts; nuts; rivets; washers; expansion-bolt shells; water cooler; electric lawn mower; sash pivot levers; clocks; oil meter; pressure gauges; wheelbarrows; brooms; brushes; caulking cotton; paper towels, etc. Blank forms and information (Circular 1772) on application to offices of Panama Canal; Asst. Purchasing Agents at 24 State St., New York City, 611 Gravier St., New Orleans, La., Fort Mason, San Francisco, Cal.; also from U. S. Engineers' offices throughout the country.

Miscellaneous Supplies.—R. S. Sterling, Chrmn., Navigation District Commrs., Houston, Tex.—Receives bids Dec. 16 for printing and lithographing, stationery and supplies, battery service and electrical repairs, blue printing and engineering supplies, fuel oil and lubricating oils, gasoline, oils and grease, towel service, ice, automobile repairs, tires and tubes, hydrated lime; plans with Port Director, Court House.

Motors.—Guyan Machine Shops, Logan, W. Va.—Wants 2 h. p. up to 20 h. p. A. C. and D. C. motors; 3 squirrel cage motors, 15 h. p., 3 phase, 60 cycle, 220 volts, with starters and rails, preferably G. E., 1200 r. p. m.; 2 h. p. Crocker-Wheeler motor, 1200 r. p. m., 230 volts, D. C.

Naphthalene and Lime.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 13 to furnish disinfectant, naphthalene and lime; delivery Philadelphia, Pa., Sch. No. 304.

Oven (Bake).—Guyan Machine Shops, Logan, W. Va.—Wants bake oven for large armatures, natural gas or electric heat.

Painting.—Board of Awards, F. A. Dolfield, City Register, Baltimore, Md.—Receives bids Dec. 15 for interior and exterior painting at the Baltimore city hospitals, Eastern Ave. extended; C. H. Osborne, Ch. Bureau of Buildings.

Painting, etc.—Beeler & Co., 67 W. Lexington St., Asheville, N. C.—Wants sub-bids on painting and finishing complete for \$33,000 golf clubhouse.

Paving.—Amarillo, Tex. See Construction News—Roads, Streets, Paving.

Paving.—Wellington, Tex. See Construction News—Roads, Streets, Paving.

Paving.—Eastland, Texas. See Construction News—Roads, Streets, Paving.

Pipe.—United Talc & Crayon Co., J. S. Holland, Sec., Glendon, N. C.—Wants prices on pipe for talc plant.

Pipe and Fittings.—C. M. Guest & Son, N. McDuffie St., Anderson, S. C.—Wants flanged pipe and fittings for complete water works plant at Kernersville, N. C.

Planer (Pony).—Machinery Record, Box 733, Richmond, Va.—Wants one pony planer about 24-in. dress on one side.

Plaster Board.—C. W. Bell, care Atlas Rock Co., 300 S. W. North River Drive, Miami, Fla.—Wants prices on plaster board for \$10,000 office building.

Plaster Board.—A. C. McMillin, 609 Poplar Ave., Clarendon, Va.—Wants prices on plaster board for dwelling.

Plaster Board.—C. R. Troutman, 118 N. Marshall St., Winston-Salem, N. C.—Wants prices on plaster board for 2 dwellings.

Plumbing.—Board of Awards, F. A. Dolfield, City Register, Baltimore, Md.—Receives bids Dec. 15 to furnish and install plumbing at Centre Street Market, Lombard St.; C. H. Osborne, Ch. Bureau of Buildings.

Posts (Fence).—Machinery Record, Box 733, Richmond, Va.—Wants 200 fence posts.

Power Line.—C. M. Guest & Son, N. McDuffie St., Anderson, S. C.—Wants power line for complete water works system for Kernersville, N. C.

Presses.—See Printing Plant Equipment.

Printing and Binding.—State Board of Control, Ex-officio Supt. of Public Printing, Charleston, W. Va.—Receives bids Dec. 17 for state printing and binding for period of two years beginning Jan. 12, 1927.

Printing Plant Equipment.—Emmet D. Gregory, Dillwyn, Va.—Wants prices on

presses, type, etc., for paper and job printing shop.

Pulleys.—Guyan Machine Shops, Logan, W. Va.—Wants pulleys, split steel, up to 36x8.

Pump.—Board of Water Commrs., Macon, Ga.—Receives bids Jan. 11 for one 10,000-gal. centrifugal pump, steam turbine driven, to be installed at Riverside Pumping Station of Macon water works; R. E. Findlay, Sec.-Treas.

Pumps.—Jasper Ice & Cold Storage Co., M. M. Gay, Pres., Jasper, Fla.—Wants prices on pumps for 10-ton capacity ice plant.

Pumps (Centrifugal).—E. C. D'Yarmett & Herndon, Room E, New York Life Bldg., Kansas City, Mo.—Wants electric-driven centrifugal pumps for number of small refineries.

Pumps (Air).—E. C. D'Yarmett & Herndon, Room E, New York Life Bldg., Kansas City, Mo.—Wants electric-driven air pumps.

Punch and Slitting Shear.—Guyan Machine Shops, Logan, W. Va.—Wants punch and slitting shear for ½-inch plate.

Quarry Equipment.—The Randle Machinery Co., 1723-25 Powers St. (Cumminsville), Cincinnati, Ohio.—Wants either new or used quarry equipment, including crushers, steam shovels, air compressors, rock drills, dump cars and tract for handling agricultural limestone.

Quarry Equipment.—American Fertilizer & Chemical Works, Thos. F. Hawkins, Pres., Georgetown, Tex.—Wants prices on equipment for all quarry work, including compressors, rock crushers, pulverizers, grinding machinery, conveyors, etc.

Radio Head Sets.—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 22 for radio head sets in quantities as may be ordered during period of six months ending June 30, 1927.

Rails.—United Talc & Crayon Co., J. S. Holland, Sec., Glendon, N. C.—Wants prices on rails.

Rails.—Machinery Record, Box 733, Richmond, Va.—Wants 50 tons of 60-lb. rails.

Range (Duplex).—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 18 for duplex coal range for U. S. V. Hospital, Oteen, N. C.

Reed, etc.—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 14 for 2800 lbs. round reed in various sizes, 330 lbs. chair cane and about 286 lbs. wide binding.

Refrigerators.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on electric refrigerators for \$1,000,000 Senior High School.

Rice and Feed Mill Machinery.—El Campo Rice Milling Co., El Campo, Tex.—Receives bids about Dec. 15 for machinery and equipment for feed and rice mill with daily output 6 cars.

Road.—Jennings, La. See Construction News—Roads, Streets, Paving.

Road.—Jonesboro, La. See Construction News—Roads, Streets, Paving.

Road.—State of Missouri will build 65 roads. See Construction News—Roads, Streets, Paving.

Road.—West Palm Beach, Fla., will build and resurface 2 roads. See Construction News—Roads, Streets, Paving.

Road.—Jacksonville, Fla., will build 2 roads. See Construction News—Roads, Streets, Paving.

Road.—State of Texas will build 3 roads. See Construction News—Roads, Streets, Paving.

Road Machine.—E. P. Lindsay, Contr., 312 King St., Portsmouth, Va.—Wants to purchase road machine, second-hand equipment.

Road Machinery.—Boca Chica Beach, Inc., Ewing D. Clark, Sec., Weslaco, Tex.—Wants road machinery for development of 100-acre beach resort.

Rock Crushers.—See Quarry Equipment.

Rolling Partitions.—C. R. Troutman, 118 N. Marshall St., Winston-Salem, N. C.—Wants prices on rolling partitions for 2 dwellings.

Rolling Partitions.—J. Frank Collins, 703 Andrews-Law Bldg., Spartanburg, S. C.—Wants prices on rolling partitions for \$115,000 Sunday school.

Roofing (Composition).—C. W. Bell, care Atlas Rock Co., 300 S. W. North River Drive, Miami, Fla.—Wants prices on composition roofing for \$10,000 office building.

Roofing (Composition).—C. R. Troutman,

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

118 N. Marshall St., Winston-Salem, N. C.—Wants prices on composition roofing for 2 dwellings.

Roofing (Composition).—E. C. Seiz, Archt., 43 Peachtree St., Atlanta, Ga.—Wants prices on composition roofing for \$60,000 store and factory.

Roofing (Composition).—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on composition roofing for \$1,000,000 Senior High School.

Roofing.—R. S. McCook, Archt., Lake Charles, La.—Wants prices on tile and composition roofing for \$625,000 hotel.

Roofing (Composition).—O. T. Hennessee, Owner-Builder, 49 Jupiter St., Atlanta, Ga.—Wants prices on composition roofing for \$60,000 apartment house.

Roofing (Composition).—A. C. McMillin, 609 Poplar Ave., Clarendon, Va.—Wants prices on composition roofing for dwelling.

Roofing (Composition).—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on composition roofing for \$260,000 courthouse and jail, Lafayette, La.

Roofing (Composition).—Jos. W. Northrop, Jr., West Bldg., Houston, Tex.—Wants prices on composition roofing for \$12,000 dwelling.

Roofing (Composition).—Duval County Board of Commrs., Jacksonville, Fla.—Wants prices on composition roofing for \$20,000 county stockade dormitory.

Roofing Tile.—C. R. Troutman, 118 N. Marshall St., Winston-Salem, N. C.—Wants prices on roofing tile for 2 dwellings.

Roofing Tile.—John Stafford White, Archt., Milton, Fla.—Wants prices on roofing tile for \$100,000 Floridale hotel.

Roofing Tile.—E. W. Kenworthy, 631 Bankers Mortgage Bldg., Houston, Tex.—Wants prices on roofing tile for dwelling.

Roofing Tile.—A. C. McMillin, 609 Poplar Ave., Clarendon, Va.—Wants prices on roofing tile for dwelling.

Roofing Tile.—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on roofing tile for \$260,000 court house and jail, Lafayette, La.

Roofing Tile.—Jos. W. Northrop, Jr., West Bldg., Houston, Tex.—Wants prices on roofing tile for \$26,000 dwelling.

Roofing Tile.—Ivey & Crook, Archts., Candler Bldg., Atlanta, Ga.—Wants prices on roofing tile for 5-story Chemistry Building at Emory University.

Shafting (Cold Rolled).—Guyan Machine Shops, Logan, W. Va.—Wants cold rolled shafting up to 4 7/16 in. diam.

Shovel (Electric).—D. C. Elphinstone (Mchy. Dealer), 120 S. Calvert St., Baltimore, Md.—Wants 3/4-yd. full-revolving tunnel shovel, electrically driven, 3 phase, 60 cycle, 220 volt; Marion preferred.

Slate Blackboards.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on slate blackboards for \$1,000,000 Senior High School.

Soapstone Pencil Machinery, etc.—United Tale & Crayon Co., J. S. Holland, Sec., Glendon, N. C.—Wants prices on machinery, tools, supplies, etc., for making soapstone pencils.

Spark Plugs.—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 10 for spark plugs, 1-piece, standard, with Frenchtown 775 porcelain or equal; 1000 3/4-in. S. C. thread with gasket and 1000 1/2-in. pipe thread, for Ford cars.

Sprinkler System.—E. C. Seiz, Archt., 43 Peachtree St., Atlanta, Ga.—Wants prices on sprinkler system for \$60,000 store and factory.

Steam Shovels.—See Quarry Equipment.

Steel.—Norfolk & Western Ry. Co., Clyde Cooke, Purchasing Agent, Room 351, N. & W. Rwy. Bldg., Roanoke, Va.—Receives bids Dec. 15 for 1700 sheets locomotive jacket steel, Contr. Serial AA-439.

Steel and Steel Plates.—Guyan Machine Shops, Logan, W. Va.—Wants steel up to 5 in. round, .30 to .40 carbon; also steel plates, 3/4 in. up to 1 1/2 in. thick.

Steel Buildings.—E. C. D'Yarmett & Herndon, Room E, New York Life Bldg., Kansas City, Mo.—Wants sectional steel buildings for number of small refineries.

Steel Doors and Grilles.—Duval County Board of Commrs., Jacksonville, Fla.—Wants prices on toolproof steel doors and grilles for windows and ventilators of \$20,000 county stockade dormitory.

Steel Sash.—J. Frank Collins, 703 Andrews-Law Bldg., Spartanburg, S. C.—Wants prices on steel sash for \$115,000 Sunday school.

Steel Sash.—Duval County Board of Commrs., Jacksonville, Fla.—Wants prices on steel sash for \$20,000 county stockade dormitory.

Steel Sash and Trim.—Sutton & Routt, Morse Arcade, Hollywood, Fla.—Wants prices on steel sash and trim for church, Fort Lauderdale, Fla.

Steel Sash and Trim.—R. S. McCook, Archt., Frank Bldg., Lake Charles, La.—Wants prices on steel sash and trim for \$625,000 hotel.

Steel Sash and Trim.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on steel sash and trim for \$1,000,000 Senior High School.

Steel Sash and Trim.—Ivey & Crook, Archts., Candler Bldg., Atlanta, Ga.—Wants prices on steel sash and trim for 5-story Chemistry Building at Emory University.

Steel Sash and Trim.—C. W. Bell, care Atlas Rock Co., 300 S. W. North River Drive, Miami, Fla.—Wants prices on steel sash and trim for \$100,000 office building.

Stills.—E. C. D'Yarmett & Herndon Room E, New York Life Ins. Bldg., Kansas City, Mo.—Wants stills for number of small refineries.

Store Front.—McGucken & McGucken Contrs., 204 Governor St., Tampa, Fla.—Wants sub-contract bids on store front or copper partition for \$382,500 Henry Plant High School.

Street.—Vero Beach, Fla. See Construction News—Roads, Streets, Paving.

Street.—St. Louis, Mo. See Construction News—Roads, Streets, Paving.

Table (Bakers).—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 15 for bakers tables, approximately 30 in. wide, 10 ft. long, 36 in. high; The Stearnes Co.'s No. 5B-3599 or equal.

Tale Machinery.—United Tale & Crayon Co., J. S. Holland, Sec., Glendon, N. C.—Wants prices on modern machinery for making tale.

Tanks (Welded).—E. C. D'Yarmett & Herndon, Room E, New York Life Bldg., Kansas City, Mo.—Wants welded tanks for number of small refineries.

Tank or Keg.—Machinery Record, Box 733, Richmond, Va.—Wants one round tank or keg of 3-in. thick pine or spruce, 8 ft. high, 8 ft. at bottom and 8 ft. at top with hoops around it; hole will be required at the top, but spot determined later; also one round tank or keg 3 in. thick pine or spruce, 5 ft. high, 4 ft. at bottom, and 3 1/2 ft. at top.

Terra Cotta Trim.—Ivey & Crook, Archts., Candler Bldg., Atlanta, Ga.—Wants prices on terra cotta trim for 5-story Chemistry Building at Emory University.

Terra Cotta Trim.—E. C. Seiz, Archt., 43 Peachtree St., Atlanta, Ga.—Wants prices on terra cotta trim for \$60,000 store and factory.

Terra Cotta Trim.—R. S. McCook, Archt., Lake Charles, La.—Wants prices on terra cotta trim for \$625,000 hotel.

Terra Cotta Trim.—Rev. A. J. Bradshaw, Pastor, First Christian Church, El Dorado, Ark.—Wants prices on terra cotta trim for \$30,000 church.

Tile.—Rev. A. J. Bradshaw, Pastor, First Christian Church, El Dorado, Ark.—Wants prices on hollow tile for \$30,000 church.

Tile.—A. C. McMillin, 609 Poplar Ave., Clarendon, Va.—Wants prices on hollow tile for dwelling.

Tile.—R. S. McCook, Archt., Frank Bldg., Lake Charles, La.—Wants prices on hollow, interior and flooring tile for \$625,000 hotel.

Tile.—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on hollow and interior tile for \$260,000 court house and jail, Lafayette, La.

Tile.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on hollow, interior and flooring tile for \$1,000,000 Senior High School.

Tile.—Joe W. Stout & Co., Sanford, N. C.—Wants prices on hollow tile for \$150,000 city hall and jail building, Orangeburg, S. C.

Tile.—J. Frank Collins, 703 Andrews-Law Bldg., Spartanburg, S. C.—Wants prices on hollow tile for \$115,000 Sunday school.

Tile.—C. R. Troutman, 118 N. Marshall

St., Winston-Salem, N. C.—Wants prices on hollow and interior tile for 2 dwellings.

Tinware.—Thos. W. Spicer, Leesburg, Fla.—Wants to correspond with manufacturers of tinware, including small coffee pots, etc.

Track Construction, etc.—O. F. Holcombe, Mayor, Houston, Tex.—Receives bids Dec. 13 for construction and rearrangement of tracks in the Port Terminal Yard, Houston.

Tractor.—Boca Chica Beach, Inc., Ewing D. Clark, Sec., Weslaco, Tex.—Wants tractor for development of 100-acre beach resort.

Truck.—Board of Awards, F. A. Dolfield, City Register, Baltimore, Md.—Receives bids Dec. 15 to furnish one 1 1/2-ton truck; O. F. Lackey, Head of Bureau of Transportation.

Truck (Heavy Oak Platform).—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 15 for heavy oak platform truck; Colson Co., No. 2511 or equal.

Trucks.—Boca Chica Beach, Inc., Ewing D. Clark, Sec., Weslaco, Tex.—Wants trucks for development of 100-acre beach resort.

Type.—See Printing Plant Equipment.

Valves.—C. M. Guest & Son, N. McDuffie St., Anderson, S. C.—Wants valves for complete water works at Kernersville, N. C.

Valves and Piping.—E. C. D'Yarmett & Herndon, Room E, New York Life Bldg., Kansas City, Mo.—Wants valves and piping for number of small refineries.

Vapor Baths.—K. C. Ferguson, M. D., Pres. of Eastland Mineral Water Co., 204 Exchange Bank Bldg., Eastland, Tex.—Wants prices on vapor and shower baths.

Vaults.—R. S. McCook, Archt., Lake Charles, La.—Wants prices on vaults for \$625,000 hotel.

Vault Doors.—McGucken & McGucken, Contrs., 204 Governor St., Tampa, Fla.—Wants sub-contract bids on vault doors for \$382,500 Henry Plant High School.

Ventilators.—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on ventilators for \$260,000 court house and jail, Lafayette, La.

Ventilators.—O. T. Hennessee, Owner-Builder, 49 Juniper St., Atlanta, Ga.—Wants prices on ventilators for \$60,000 apartment house.

Ventilators.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on ventilators for \$1,000,000 Senior High School.

Ventilators.—Rev. A. J. Bradshaw, Pastor, First Christian Church El Dorado, Ark.—Wants prices on ventilators for \$30,000 church.

Ventilators.—Duval County Board of Commrs., Jacksonville, Fla.—Wants prices on ventilators for \$20,000 county stockade dormitory.

Ventilators.—C. R. Troutman, 118 N. Marshall St., Winston-Salem, N. C.—Wants prices on ventilators for 2 dwellings.

Ventilators.—Ivey & Crook, Archts., Candler Bldg., Atlanta, Ga.—Wants prices on ventilators for 5-story Chemistry Building at Emory University.

Wire (Fence).—Machinery Record, Box 733, Richmond, Va.—Wants 2000 ft. of fence wire, 3 ft. high.

Wire Glass.—Wm. T. Nolan, Canal-Commercial Bldg., New Orleans, La.—Wants prices on wire glass for \$260,000 courthouse and jail, Lafayette, La.

Wire Glass.—Kiehnel & Elliott, Archts., 930 Seybold Bldg., Miami, Fla.—Wants prices on wire glass for \$1,000,000 Senior High School.

Wire Glass.—Sutton & Routt, Morse Arcade, Hollywood, Fla.—Wants prices on wire glass for church, Fort Lauderdale, Fla.

Wire Glass.—Ivey & Crook, Archts., Candler Bldg., Atlanta, Ga.—Wants prices on wire glass for 5-story Chemistry Building at Emory University.

Wire Glass.—E. C. Seiz, Archt., 43 Peachtree St., Atlanta, Ga.—Wants prices on wire glass for \$60,000 store and factory.

Wire Glass.—Rev. A. J. Bradshaw, Pastor, First Christian Church, El Dorado, Ark.—Wants prices on wire glass for \$30,000 church.

Wood Splitter.—R. W. Bates, Tallapoosa, Ga.—Wants to purchase second-hand wood splitter.

X-ray Equipment and Supplies.—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids Dec. 10 for X-ray equipment and supplies.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers, or subscribers, or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Oil Promoting by Dynamite.

The E. I. du Pont de Nemours Co. announces what it calls "a revolutionary method of discovering oil" by means of dynamite explosions in shallow drills, which register shocks on seismographs set up nearby for the purpose. The new process, the company says, is being widely used in the Gulf coast region. It is said that by means of the new method geologists are able to locate oil directly and scientifically, and can thus eliminate the great wastes due to blind drilling. So far the method has been used only in the salt dome formation of the Gulf coast, but, while this geologic formation is considered peculiarly favorable to the process, it is believed that experimentation will develop a technique suited to different formations in other regions. Over 2,000,000 pounds of dynamite, it is said, have been used this year in prospecting for oil.

Chain Belt Mixer Representatives.

The Chain Belt Company of Milwaukee, Wis., manufacturer of Rex mixers and pavers, elevators, conveyors, chain and transmission machinery, has appointed three new distributors for its mixer line. In Clarksburg, W. Va., the West Virginia Mine Supply Company will cover that part of West Virginia which is included in 14 counties, viz.: Wetzel, Tyler, Pleasant, Worth, Calhoun, Braxton, Webster, Randolph, Pendleton, Hardy, Tucker, Preston, Monongalia and Hampshire. The Builders' Supply Company of Shreveport, La., will cover the northern half of Louisiana, and the George R. Feldman Company of Wilkes-Barre, Pa., will cover the sales territory in and around that city. Machines are carried in stock by all these representatives.

White Company to Display Dump Trucks and Flusher.

The White Company of Cleveland, Ohio, will have an especially interesting motor-truck exhibit at the annual convention and road show of the American Road Builders' Association in Chicago. The White display will include a Model 52, heavy-duty power dumping truck, a heavy-duty 1500-gallon, double-unit street flusher with full electric light equipment, and the White 2½-ton new two-batch road builders' truck with a wheelbase of 144 inches. Vocational Sales Manager W. A. Maynard and Paul Starbird of the vocational sales department's municipal and road-building division, will be in charge of the exhibit.

Bags, Bales and Boxes Handled With Speed.

The electric portable pillers, conveyors, loaders and unloaders manufactured by the McKinney-Harrington Company of North Chicago, Ill., are great savers of overhead costs in business because they will handle bags, bales and boxes at the rate of one ton per minute, according to the advertisement of the firm which appears elsewhere in this issue. A picture of the standard type appears in the advertisement, which says that it piles 15 feet and less. Machines piling 16 feet and over have power hoist instead of hand hoist. Owing to an unfortunate error one of these advertisements in a recent issue said that the machines operated at the rate of one ton per hour instead of one ton per minute, which latter is the correct rate.

Inquiries As to Public Financing.

G. E. Barrett & Co., Inc., of 120 Broadway, New York, and 208 South LaSalle street, Chicago, are inviting inquiries relating to public financing. Among issues of securities which they have handled are those of Midwest Gas Company, the Southern Gas Company, the International Power Company, Ltd., the Cady Lumber Corporation and the Electric Ferries, Inc.

Resignation of T. A. Clark.

T. A. Clark, who is widely known in steel circles, has resigned as general manager of the Standard Engineering Company, Ellwood City, Pa., his resignation to take effect on January 1. Mr. Clark's retirement from his position marks, it is stated, the culmination of a long and successful career with the company as general manager in charge of sales and production. He has been instrumental in building up the business organization to the prominent position which the company today enjoys in the steel-plant industry. During the 20 years he has been with it the size and production of the Ellwood City plant has trebled. Besides being general manager, Mr. Clark has also acted as secretary and treasurer of the company.

Progress of Roanoke, Va.

The Chamber of Commerce of Roanoke, Va., B. F. Moomaw, secretary, has issued an exceedingly interesting and attractive statistical folder concerning the city and its manifold activities. The last data of this nature were published in May of 1925, and some gratifying progress is shown. At that time the total number of industrial employes reported was 17,000; now it is 18,518. Then the total value of manufactured products per annum was \$60,000,000; now it is \$68,490,549. Moreover, capital and surplus employed in industries in May, 1925, totaled \$24,000,000 approximately, but now it amounts to \$32,878,851. The population increase during the last year and a half is given as 2000, the present total being 65,000. The folder is beautifully illustrated.

Austin Gets Important Contracts.

The Ohio Rubber Company, Willoughby, Ohio, recently awarded a contract for a manufacturing and storage addition to its plant to cost about \$60,000. The new structure is an Austin No. 2 Type Building, with a monitor roof, part one story and part two story, with a loading dock extending its entire length. A second contract was let to the Austin Company of Cleveland for the design and construction of a manufacturing building 90x160 feet, one story, to adjoin the new warehouse. Over 100 tons of structural steel have been shipped from the Austin mill at Euclid Village, Ohio. The investment in this new construction is about \$100,000. General Motors Corporation, Dodge Bros. and other automobile manufacturers use the products of Ohio rubber in the building of their cars. C. E. Hyke, manager of the Ohio Rubber Company, stated that 25 additional men would be required immediately upon the completion of the first unit. Henry Hallock is president. Branch offices are in Detroit and Cincinnati.

A Good Business-Getting Letter.

The Eufaula (Ala.) Chamber of Commerce is sending out a letter to 3000 manufacturers of shirts, hosiery, sweaters, handkerchiefs, athletic underwear, towel and other cotton goods manufacturers that shows sympathetic understanding of the problems faced by a manufacturer who contemplates moving his plant South, and should therefore make such a manufacturer feel that, should he select a factory site in Eufaula, he will receive such treatment at the hands of the city of Eufaula as would put him in the best possible position to succeed. "We realize," writes R. D. Hays, manager of the Eufaula Chamber of Commerce, "what an enormous undertaking it is for a Northern manufacturer to pick up a mill and move it South. Eufaula is willing to lend every reasonable assistance and anxious to co-operate in every way possible. We are confident that we can, with facts and figures, convince you that we have an excellent location for your Southern plant, and that a proposition could be worked out that would be of interest to you." The letter accompanies a brief industrial survey of the advantages Eufaula offers to industry.

To Protect Aluminum From Corrosion.

Dr. Alfred Gradenwitz of New York city writes the MANUFACTURERS RECORD that a Bohemian inventor, B. Jiroka, who is at present living in this country, has devised a simple and inexpensive method to protect aluminum from corrosion. It not only protects the metal, but permits it to be coated so as to accurately resemble copper, bronze, gold, silver, nickel, etc. It may also be decorated in any desired manner. Previous attempts to protect aluminum from corrosion, Dr. Gradenwitz remarks, have not succeeded because it is difficult to avoid creating a galvanic current, which accelerates instead of hinders corrosion. The protective coating is applied by means of a bath given in enameled vessels and maintained at a temperature of 90 degrees centigrade. It is claimed that to coat a square yard of aluminum would cost only from one cent to two and a half cents. Automobile bodies, lighting fixtures and many other articles can be coated. The process is operated by the Otto Sprenger Corporation, 183 Madison avenue, New York.

District Sales Representatives Wanted.

The A. P. Green Fire Brick Company and the Liptak Fire Brick Arch Company of Mexico, Mo., are in want of district sales representatives for their products, saying that there are desirable territories open on an attractive basis to responsible, aggressive representatives who are equipped to sell them. Communications may be addressed direct to the companies at Mexico, Mo., or else information may also be had at their booths in the New York Power Show, which is being held from December 6 to December 11, inclusive.

Struthers-Wells Branch in Philadelphia.

The Struthers-Wells Company of Warren, Pa., manufacturer of riveted and welded steel-plate construction, has opened an office in Philadelphia, its location being at Room 807 in the Liberty Trust Building at the corner of Broad and Arch streets, with W. L. DeLaney as manager.

Wallin & Comer Open Branch.

Wallin & Comer, architects, Savannah, Ga., have opened a branch office in Waycross, Ga., with W. L. Chafin in charge, its location being 428 Bunn Building. Manufacturers' catalogues and specification data are desired.

Jones and Laughlin-Win 100 Per Cent Prizes

Prizes for every product exhibited by it at the Sesqui-Centennial International Exposition in Philadelphia have been awarded the Jones and Laughlin Steel Corporation of Pittsburgh. This is a 100 per cent award and consists of a grand prize, two gold medals and a medal of honor. A gold medal was awarded the new statue entitled "Steel," presented to the Sesqui by the Jones and Laughlin corporation as a memorial to the accomplishments of the entire steel industry of America during 150 years of American independence. The statue, designed by Frank Vittor of Pittsburgh, is 70 feet high and symbolizes the steel industry by three heroic figures of steel workers. A gold medal was also awarded to the firm for its new Jalcas steel, brought out during the year. A grand prize was also awarded it for its cold-rolled and cold-finished steel bars. The corporation has been manufacturing cold-rolled steel more than 70 years, and 50 years ago, in the Philadelphia Centennial Exposition of 1876, a medal was awarded to this firm for the same product. A medal of honor was awarded to the Junior beam, a new lightweight structural rolled-steel building section, brought out this year by Jones and Laughlin.

Industrial Traffic Managers.

The functions of the industrial traffic manager, the information he requires, his value to a company and his place in an organization are all discussed in the fourth "Business

Organization" leaflet issued by the policyholders' service bureau of the Metropolitan Life Insurance Company. A few copies are available and they may be secured from the policyholders' service bureau, Metropolitan Life Insurance Company, 1 Madison avenue, New York city.

Large Order for Moore Dry Kilns.

A deal has just been negotiated by which the Moore Dry Kiln Company of Jacksonville, Fla., is to furnish and install ten of its improved kilns at the plant of the Northwestern Cooperage and Lumber Company at Gladstone, Mich. Each kiln will be 19 by 120 feet, cross-pile, progressive type, and especially designed for drying green maple lumber. They will be of fireproof construction throughout and equipped with Moore asbestos-protected metal doors. Work has begun.

"Esso" Lumber Advertising Work.

The Exchange Sawmills Sales Company, R. A. Long Building, Kansas City, Mo., has been doing some superior advertising in the newspapers of Dallas, Fort Worth and Amarillo, Tex. The feature of this campaign is the stressing of good construction, the use of good material, particularly lumber, and urging the prospective home builder to rely upon his lumber dealer. The effort is to focus the attention of home builders upon good construction and good lumber, so that they will depend

upon well-established and reliable dealers and contractors, denying their patronage to men who pursue "fly-by-night" methods of building quickly with a certain specious attractiveness, and then selling out and getting out before the home buyer finds that he has a poor house on his hands. Emphasis is laid upon the "Esso" brand of lumber.

Morse Chain Exhibit at Philadelphia.

The exhibit made by the Morse Chain Company of Ithaca, N. Y., at the Sesqui-Centennial Exposition in Philadelphia was distinctive and impressive. It was like the interior of an old stone mill, with the rough wall partly cut away, showing an overshot water wheel in operation. From the water-wheel shaft a chain six inches wide drove a countershaft, while a second drive ran to a generator rheostat, switches and meters making the power plant complete. Water for driving the wheel was supplied by a pump chain driven by a motor, this pump drive being enclosed in a standard Morse oil-tight and dust-proof case with a drip oiler. Besides protecting the operator, the case keeps dust and grit from the chain and prevents oil or grease from being thrown around. It is a simple and effective means of lubrication. Visitors were impressed by the quietness with which these three drives ran. Immediately alongside of them there was no interference with conversation. Chain drives are used throughout the entire field of power transmission.

Our Growing Air-Transport Service.

On January 1 last there were 369 miles of air-transport services in operation by private enterprises and there were 2566 miles operated by the Postoffice Department. Since that time air-transport service has made rapid progress and between 6000 and 7000 miles of airways are now under actual operation, and with the contemplated expansion under way, most of the important centers of the country will be interconnected by this new form of transportation, carrying mail, express and passengers.

The Air Commerce Act of 1926, which was approved last May, established a Federal policy with reference to commercial aeronautics and placed its administration under the Department of Commerce. In general, the Act provides the same services which have been given to the navigation of water over a hundred years. The Department is charged with the duty of registering eligible aircraft, certifying to their air worthiness, examining the operating personnel and the air-navigation facilities, and also establishing air-traffic rules. It is authorized to lay out airways, provide for lighting and emergency-landing fields, and also furnish assistance to aviators, such as radio direction, fog-protection facilities, weather information and other aids to navigation.

It has been the purpose of the Government to secure better development of transportation for commercial purposes; to create private commercial services, which can relieve the postoffice of its direct expenditure upon air mail, and by aiding in the creation of a large commercial air fleet, with its personnel and accompanying manufacturing industry, give a fundamental military reserve to the country.

Jenkins Process for Shreveport Refinery.

Shreveport, La.—The Corco Oil Refining Corporation of Shreveport has contracted with the Graver Corporation of East Chicago, Ind., for two high-pressure Jenkins cracking process units, the equipment to be installed in the Shreveport refinery of the Corco Company.

\$350,000 for High School at Lexington.

Lexington, Ky.—The Board of Education has awarded to the J. T. Jackson Lumber Company general contract for the construction of a new high-school building. The bid of \$327,220 does not include the contract for heating, ventilating, plumbing and electrical equipment. A bond issue of \$400,000 was recently voted for the expansion of the school system here and \$350,000 of that amount remains for the new building. Warner & McCornack of Cleveland, Ohio, are the architects. Robert McMeekin of Lexington is the associate architect.

Miami Shores to Sell \$175,000 of Bonds.

Miami Shores, Fla.—Sealed bids will be received until December 20 at the office of Edward C. Dougherty, town clerk of Miami Shores, for the purchase of \$175,000 of improvement bonds, to bear an interest rate of 6 per cent. The bonds will be apportioned as follows: Municipal buildings, \$94,000; garbage-disposal equipment, \$11,000; street lights and equipment, \$35,000; fire truck, sinking and equipping fire wells, etc., \$30,000; drainage and mosquito control, \$5000.

Cumberland to Make Drive for Industries.

Cumberland, Md.—The Cumberland Chamber of Commerce, through a personal and advertising campaign of the city's advantages, will soon launch a drive for bringing additional industries to Cumberland and for the expansion of industries already here. At a meeting of the board of directors the Chamber voted to appropriate \$5000 for advertising the city, details to be handled by a committee, of which Thomas B. Finan is chairman.

\$250,000 for New Houses at Richmond.

Richmond, Va.—The Housing Investment Company has announced plans for the erection of 30 houses to cost about \$250,000. They are to be seven-room, semi-detached brick structures, with similar floor plans but different exteriors.

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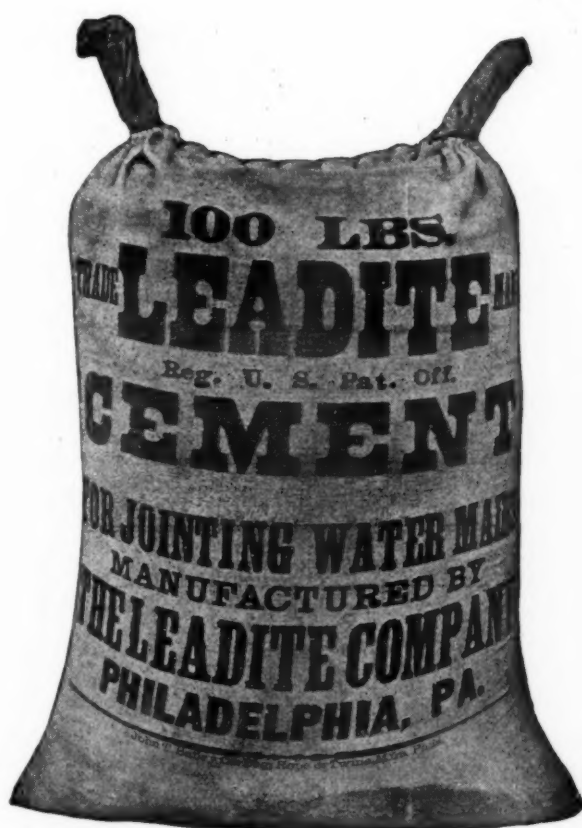
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FINANCIAL NEWS

Bond Issues Proposed

Ala., Huntsville—School—City plans \$75,000 bond issue. Address City Clk.

Ala., Montgomery—Road—State, W. W. Brandon, Governor, plans \$25,000,000 bond issue; special session of Legislature called.

Ala., Selma—Road—Dallas County, W. M. Vaughan, Judge, voted \$200,000 bonds.*

Ark., Little Rock—Paving—Comms. of Street Improvement No. 438, J. H. Bilheimer, Jr., 111 East Capitol Ave., receives bids soon for \$60,000 bonds.

Fla., Brooksville—Municipal Improvement—City, J. C. Kazee, Clk., receives bids December 18 for \$235,000 6% \$1000 denom. bonds.

Fla., Clearwater—Pinellas County Comms. plan \$200,000 bond issue to improve county fair at Largo.

Fla., Daytona Beach—Paving—City, Walter A. Richards, Mgr., plans selling \$50,000 bonds.*

Fla., De Funiak Springs—Municipal Improvement—City, E. L. Townsend, Mayor, receives bids Dec. 17 for \$25,000 6% bonds.

Fla., Fort Lauderdale—Bridge—City Comm., Glenn E. Turner, Auditor and Clk., receives bids Dec. 21 for \$300,000 6% \$1000 denom. bonds.

Fla., Fort Pierce—Municipal Improvement—City, Elwyn N. Moses, Clk., plans \$700,000 bond issue for sidewalks, curb, gutters, sewers, water works, white way.

Fla., Frostproof—School—Polk County voted \$44,500 Frostproof Special Tax School Dist. No. 22 bonds; A. B. Connor, Sec. Board of Public Instruction.*

Fla., Green Cove Springs—Road—Clay County voted \$90,000 bonds. Address County Comms.

Fla., Lake Hamilton—Street—Town, F. A. Wight, Clk., receives bids Dec. 15 for \$142,000 6% \$1000 denom. bonds.

Fla., Live Oak—Highway—Suwannee County Comms., J. W. Bryson, Clk., receives bids Jan. 6 for \$800,000 5½% \$1000 denom. Suwannee River Scenic Highway bonds.

Fla., Miami—Improvement—Dade County Comms. advises regarding sale of \$500,000 bonds on Dec. 2: "No sale."

Fla., Miami Shores—General Improvement—Town, Edward C. Dougherty, Clk., receives bids Dec. 20 for \$175,000 6% \$1000 denom. bonds.*

Fla., Pompano—Municipal Improvement—Town, T. E. Ralnes, Clk., receives bids December 10 for \$750,000 6% \$1000 denom. bonds.

Fla., St. Petersburg—School—City may vote on \$400,000 bonds. Address Pinellas County School Board, Clearwater.

Fla., Tampa—Courthouse—Hillsborough County defeated \$1,500,000 5% bond issue. Address County Comms. Lately noted voted.

Fla., West Palm Beach—Improvement—City Comm., H. J. Daugherty, Clk., receives bids Dec. 16 for \$2,171,000 bonds.

Ga., Hickox—School—J. A. Murray, Dist. Atty., receives bids Dec. 14 for \$20,000 6% \$500 denom. Hickox Consolidated School Dist.

Ga., Thomasville—Street Improvement—City, C. C. Pittman, Clk., receives bids December 20 for \$90,000 4½% \$1000 denom. bonds. Lately noted bids December 13.

Ky., Catlettsburg—Road—Boyd County voted \$600,000 bonds. Address County Comms.

Ky., Louisville—Free Bridge—City, J. J. Kunz, Comptroller, defeated \$5,000,000 bond issue.*

La., New Orleans—Municipal Improvement—City, Arthur J. O'Keefe, Mayor, voted \$7,500,000 bonds: \$2,000,000 municipal auditorium \$500,000 criminal courts building, \$750,000 parish prison and house of detention, \$1,200,000 garbage collection and disposal system, \$1,200,000 street paving, \$1,800,000 purchase land for city park extension.*

La., Olla—Public Improvement—Board of Aldermen, B. E. Blake, Mayor, receives bids Dec. 21 for \$22,000 6% \$500 denom. bonds. Lately noted bids Dec. 13.

Miss., Corinth—School—Gift Consolidated School Dist., Alcorn County, voted \$10,000 bonds. Address Pres. Board of Trustees.

Miss., Jackson—Municipal Improvement—City, Walter A. Scott, Mayor, receives bids about Jan. 15 for \$1,000,000 bonds.*

Miss., Lucedale—Road, Bridge—George County Board of Suprvs., J. B. Goff, Pres., has rescinded and postponed \$275,000 bond election. Lately noted election Nov. 30.

Miss., Vicksburg—Road—Bridge—Warren County voted \$210,000 bonds: \$150,000, road; \$60,000, bridges. Address Board of Suprvs.*

Miss., Vicksburg—Road, Bridge—Warren County Board of Suprvs., J. G. Sherard, Chancery Clk., receives bids early part of Jan. for \$210,000 bonds.*

Miss., Natchez—Paving—Board of Aldermen, L. A. Whittington, Mayor, plans \$265,000 bond issue.

Mo., Cape Girardeau—Road—Delta Special Road Dist., Cape Girardeau County, voted bonds. Address County Comms.

N. C., Fayetteville—Drainage—Sandy Creek Drainage Dist. Comms. plan selling at private sale \$59,000 6% bonds. Address Bruce Craven, Atty., Trinity, N. C.

S. C., Greenville—Road—Greenville County Comms. receive bids about Jan. 1 for \$1,000,000 bonds.

S. C., Spartanburg—Highway—Spartanburg County Highway Comm., J. L. M. Williams, Clk., receives bids Dec. 14 for \$500,000 5% \$1000 denom. bonds.*

Tenn., McKenzie—City votes Dec. 14 on \$225,000 bonds: \$200,000 street improvement, \$25,000 city hall. Address City Clk.

Tex., Amarillo—Refunding—City, Jeff D. Bartlett, Mgr., receives bids Dec. 7 for \$250,000 5% bonds.

Tex., Brownsville—Road—Cameron County Comms., Oscar C. Dancy, Judge, receives bids Jan. 10 for \$100,000 4½% bonds.*

Tex., Brownsville—Road—Cameron County Comms., Oscar C. Dancy, County Judge, will call election Dec. 30 for \$6,000,000 bonds.*

Tex., Brownsville—City receives bids Jan. 10 for \$500,000 5% bonds. Address City Clk.

Tex., Brownsville—Drainage—Cameron County Water Improvement Dist. No. 6, El Jardin Water Dist., will call election December 21 on \$600,000 bonds; Oscar C. Dancy, County Judge.

Tex., Canyon—Road—Randall County, Rector Lester, County Judge, will call election Dec. 18 on \$250,000 bonds.*

Tex., Crowell—Road—Foard County Comms. will call election about Jan. 4 on bonds.

Tex., Dalton—Water Works—City will sell bonds after Jan. 1; Dalton & Parker, Engrs., 319 Wilson Bldg.

Tex., Farwell—Road—Parmer County, E. F. Lokey, County Judge, will call election about Jan. 4 for \$200,000 bonds.

Tex., Floydada—Road—Floyd County, E. C. Nelson, Jr., County Judge, will call election about Jan. 4 on \$500,000 bonds.

Tex., Karnes City—Irrigation—Karnes County Irrigation Dist. No. 1, J. B. Carrington, Bedell Bldg., San Antonio, votes in Jan. on about \$2,000,000 bonds; Hugh M. Taylor & Co., Engrs., Bedell Bldg., San Antonio.

Tex., La Feria—Paving—City, J. A. Raymond, Sec., will call election Dec. 15 on \$50,000 bonds.

Tex., Laredo—Road—Webb County, A. Winslow, County Judge, plans selling \$300,000 5½% \$1000 denom. bonds.*

Tex., Levelland—City votes Dec. 22 on \$50,000 water works and \$75,000 sewer bonds. Address City Sec. or Hawley & Roberts, Engrs., Box 1115, Lubbock.*

Tex., Lewisville—Municipal Improvement—City votes Dec. 20 on \$92,000 bonds: \$30,000 sewer, \$62,000 water works. Address City Clerk.

Tex., Matador—Road—Motley County, C. L. Glenn, County Judge, will call election about Jan. 4 on \$350,000 bonds.

Tex., Muleshoe—Road—Bailey County, Wm. G. Kenedy, County Judge, will call election about Jan. 4 on \$500,000 bonds.

Tex., Olton—Road—Lamb County, E. N. Buries, County Judge, will call election about Jan. 4 on \$750,000 bonds.

Tex., Paducah—Road—Cottle County, Jas. L. Whitley, County Judge, may call election about Jan. 4 on \$500,000 bonds.

Tex., Plainview—Road—Hale County, Meade F. Griffin, County Judge, will call election about Jan. 4 on \$900,000 bonds.

Tex., San Antonio—Public Improvement—City, Fred Fries, Clk., receives bids Dec. 16 for \$3,000,000 4½% bonds.*

Tex., Taylor—Purchase Sewer Lines—City, A. V. Hyde, Mgr., will call election Dec. 20 on \$100,000 5% bonds.*

Tex., Vernon—Road—Wilbarger County Comms. will call election about Jan. 4 on bonds.

Va., Clarendon—Water Works—Arlington County Board of Water Supply, Asa E. Phillips, Ch. Engr., receives bids Dec. 15 for \$540,000 4½% bonds.

Va., Richmond—State Board of Sinking Fund Comms. receives bids Dec. 15 for \$2,500,000 4¼% State Highway certificates of indebtedness.

Va., Roanoke—School—City Comm. may issue \$1,000,000 bonds. Address D. E. McQuilkin, Supt. of Public Schools.

Va., Virginia Beach—Municipal Improvement—Town, Mayor Ashburn, plans \$110,000 bond issue: \$35,000, paving; \$65,000, sewer.

W. Va., Charleston—Road—Kanawha County Court, Omer Given, Pres., will call election Dec. 21 on \$391,000 bonds for Jefferson Dist.*

W. Va., Chester—School—Chester Independent School Dist. votes Dec. 14 on \$60,000 5½% bonds.

W. Va., Richwood—Street—City votes Jan. 11 on \$50,000 bonds. Address City Clk.

Bond Issues Sold

Ala., Mobile—Funding—City, S. H. Hendrix, Clk., sold \$500,000 4¼% bonds to I. B. Tigrett & Co., Jackson and Memphis, Tenn., at par, accrued interest and premium of \$19,700.*

Ark., Helena—Street—A. P. Coolidge, Sec. Street Improvement Dist. No. 16, sold \$52,600 bonds to W. B. Worthen Co., 500 Main St., Little Rock, at 101.

Fla., Apalachicola—Street—City sold \$79,000 6% bonds to Walter, Woody & Heimerdinger, Dixie Terminal Bldg., Cincinnati, O.

Fla., Lake Wales—Municipal Improvements—City sold \$290,000 6% bonds to Ryan, Sutherland & Co., Toledo, Ohio.

Fla., Tampa—School—Hillsborough County Board of Public Instruction, W. D. F. Sripes, Sec., sold \$30,000 6% Special Tax School Dist. No. 3 bonds to Lawrence Martin, 3810 Tampa St., at \$30,200 and accrued interest.*

Ky., Mayfield—Street—City, John M. Covington, Treas., sold \$80,090.29 bonds to First National Bank at par and accrued interest.

La., Jennings—Road—Jefferson Davis Parish Police Jury, John T. Hood, Clk., sold \$80,000 6% bonds to Caldwell & Co., Nashville, Tenn., at par, accrued interest and premium of \$600.

La., Lafayette—Drainage—Lafayette Parish Police Jury sold \$35,000 6% Indian Bayou Sub-Drainage Dist. bonds to Bank of Lafayette Trust Co., Lafayette at par.

Md., Rockville—Road—Montgomery County Comms., Berry E. Clark, Clk., sold \$48,000 5% bonds jointly to Townsend Scott & Son, 209 E. Fayette St., and Stein Bros. & Boyce, 6 S. Calvert St., all Baltimore, at par and accrued interest.*

Miss., Magnolia—School—Pike County Comms., sold \$30,000 5¼% bonds to Capitol National Bank, Jackson, at premium of \$200.

North Carolina—First National Bank of New York and Associates purchased \$5,000,000 public school and \$5,000,000 highway 4½% bonds, with option on remaining \$10,000 highway bonds until April 1, 1927; R. B. Lacy, State Treas. Lately noted bids for \$20,000,000.

N. C., Elizabethtown—Road, Bridge—Bladen County, W. A. Ferguson, Clk., sold \$50,000 5¼% bonds to Bruce Craven, Trinity, John J. George and George H. Burr & Co. at par and interest.

N. C., Raleigh—School—Raleigh School Committee, H. P. Srygley, Sec., sold \$400,000 4¼% bonds to A. B. Leach & Co., 62 Cedar St., Second Ward Securities Co., both New York, and Taylor Ewart & Co., 127 S. LaSalle St., Chicago, Ill.*

N. C., Scotland Neck—Water Works, Sewer—Town, Irwin Clark, Clk., sold \$30,000 6% bonds to W. L. Slayton & Co., Dime Bank Bldg., Toledo, at premium of \$9.*

S. C., Lexington—Highway—Lexington County Comms., George C. Steele, Chmn.,

(Continued on page 128)

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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City

FINANCIAL NEWS

(Continued from page 126)

sold \$300,000 4½% bonds to People's National Bank, Rock Hill.

Tex., Eastland—School—Comms. of Eastland Independent School Dist. sold \$150,000 5¼% bonds to Brown-Crummer Co., Schweitzer Bldg., Wichita, Kan., at par.

W. Va., Weston—Road—Lewis County Comms. sold \$220,000 5¼% Hackers Creek Road Dist. refunding bonds to White-Phillips Co., Davenport, at premium of \$1330.

Building and Loan Associations

Md., Baltimore—South Building & Loan Assn., Inc., Room 46, Maryland Life Bldg., capital \$1,300,000, incorporated; John A. Farley.

Miss., Greenwood—Masonic Temple Building Assn., capital \$85,000, incorporated; W. L. Scott, L. K. Myrick.

New Financial Corporations

Ark., Monett—Citizens State Bank of Monett, capital \$50,000, chartered; L. W. Finch, Pres.; Robert Braden, Cashier; formed by consolidation of First National Bank, Levi Rodgers, Pres., and Citizens Bank, Luke Finch, Pres.

Ark., Pine Bluff—Cotton Belt Bank and Trust Co., capital \$100,000, organized; Chris C. Handley, Pres., 2402 Cherry St.; takes over Cotton Belt Savings and Trust Co.

D. C., Washington—Continental Mortgage & Investment Co., capital \$200,000, incorporated; A. O. Dille, 1624 Webster St. N. W.

Md., Baltimore—Carter, Morgan & Co., Inc., Room 401 Maryland Trust Bldg., incorporated; Lloyd S. Carter.

Mo., Charleston—Peoples Exchange Bank of Charleston, capital \$50,000, chartered; R. A. Barry, H. A. Coon; formed by merger of Peoples Bank, R. A. Barry, Pres., and Farmers Exchange Bank, John C. Russell, Pres.

S. C., Columbia—South Carolina Cotton Finance Co. of Columbia, capital \$50,000, chartered; August Kohn, Sec.-Treas., 1520 Senate Bldg.

Tex., Beaumont—Morgan Plan Co., Inc., 395 Main St., capital \$50,000, organized; Oliver J. Todd Pres.*

Tex., Brady—Brady Investment Co., capital \$15,000, incorporated; F. R. Wulff, H. F. Swenker.

Tex., Dallas—Dored Investment Co., capital \$10,000, incorporated; R. E. D. Saner, Magnolia Bldg.

Tex., Dallas—Texas Cotton Finance Corp., capital \$5,000,000, plans incorporation; J. A. Pondron, Republic Bank Bldg., Chmn. of organization committee, Dallas.

Tex., Donna—First National Bank of Donna, capital \$25,000, organized; B. S. Roberts, Correspondent.

Tex., Houston—Home Investment Co., incorporated; Frost Woodhull, J. M. Slaton, Jr.

Tex., Rankin—First State Bank of Rankin, capital \$20,000, organized; John F. Lane, J. W. Robbins.

First National Bank, A. Nash, Pres., Kaufman, Tex., consolidated with Citizens National Bank, C. B. Harton, Pres.; Jack Nash will serve as president; C. B. Harton, V.-P.

National Bank of Commerce, R. S. Cohoon, Pres., Norfolk, Va.; Norfolk National Bank, A. B. Schwarzkopf, Pres., and Trust Co. of Norfolk, H. M. Kerr, Pres., plans merging into one organization Jan. 1, with combined resources of \$40,000,000.

Carnegie Wrought-Steel Wheels, Etc.

The first edition of a fine book of 138 pages of data, tables and specifications concerning wrought-steel wheels and other circular sections, forged-steel axles and their design has been published by the Carnegie Steel Company, Pittsburgh, Pa. It is very full and complete and is printed on heavy paper, so that it will sustain the wear incident to its use as a book of reference. It is liberally illustrated.

Trade Literature

Lockwood Paper Trade Directory, 1927.

The fifty-second annual edition of Lockwood's Directory of the Paper and Allied Trades has been published by the Lockwood Trade Journal Company, Inc., 10 East 39th street, New York. It is for the year 1927 and includes the city addresses of mills and mill-supply houses; classified lists of paper-mill products and pulp-mill products in both the United States and Canada, separately; addresses of coated-paper manufacturers, envelope manufacturers, glazed and coated-paper manufacturers, idle mills, index to mills, lists of mill officials, pad manufacturers, paper merchants in both the United States and Canada, besides stock and rag dealers, bag and box manufacturers, paper and pulp mills on this continent and also in South America; also a vast amount of kindred information of value to everyone concerned with paper and its uses. In addition to the regular office edition there is a special edition of pocket size for travelers.

Lehigh Portland Cement Homes.

A beautiful, entertaining and instructive book entitled "Building Better Homes" has been issued by the Lehigh Portland Cement Company of Allentown, Pa., and Chicago, Ill. The contents relate to the progress of the work of the company begun about a year ago for the design of moderate cost homes to be built of Portland cement concrete masonry and free from fire dangers. There is an abundance of pertinent reading matter, but the principal charm of the book lies in the large number of fine pictures, many of them accurately and attractively colored, so that even the casual reader may see at a glance just how one of these cosy homes looks when completed and in pleasing environment. There are also numerous illustrations, showing in detail how this kind of building is erected, with scenes of workmen actually engaged in their respective lines.

Sheet Steel Safety in Buildings.

Volume 2, Number 6, of Making Markets, which is published by the Sheet Steel Trade Extension Committee, 715 Oliver Building, Pittsburgh, Pa., contains a discussion of this product and its connection with prosperity from the pen of Harper Leech. Although there are some other articles of much interest, particularly in view of the great emphasis that is being placed on fire prevention, the first article is so outstanding as to command immediate attention from all readers. The booklet is handsomely illustrated with appropriate pictures showing the great value of sheet steel in building construction.

New Osgood Shovel Bulletin.

Bulletin 2620 of the Osgood Company, manufacturers of excavating machinery, Marion, Ohio, relates particularly to their one-yard heavy-duty gas or electric shovel. This machine, it is stated, is built to stand up under heavy service. It is also designed to give efficient service as a crane, with hook-block or with clamshell bucket, or else as a dragline excavator or as a back hoe. It is ready for any kind of excavating or material-handling operation without any changes in the operating machinery, the only changes needed being buckets, booms, etc.

Crawfordsville Roof-Tile Machines.

The Crawfordsville Machinery Company, manufacturers of roof-tile machines, Indianapolis, Ind., has published an illustrated folder giving particulars concerning its machines, with outline pictures, so that all details may be understood. Also pictures of the different types of tile produced by the machines, these being shown in color.

Reading Wrought-Iron Pipe.

Bulletin No. 2 of the Reading Iron Company, Reading, Pa., gives complete information, with appropriate pictures, about Reading pipe, which is made of genuine wrought-iron knurled for instant and positive identification. There are several articles of general interest, showing the effects of the use of cheap pipe and the advantages following the use of wrought-iron pipe. Following these is a most interesting article about the manufacture of wrought-iron pipe. There are many instances of how the pipe resists corrosion.

International Cottonseed Directory.

The International Cottonseed Products Directory for 1926 and 1927, has been published by the Cotton and Cotton Oil News, Dallas, Texas. It contains a list of American cottonseed and other vegetable oil mills, refineries, linseed oil mills, cottonseed products brokers, lint buyers, oleo factories, fertilizer factories, lint and felt buyers, brokers and manufacturers, chemists, cotton compresses, lard compound refiners, etc.; also a large list of wholesale grain and feed dealers in the United States. The book, which consists of about 500 pages, is printed in good, clear type on substantial paper and is bound in a cloth cover of green and gold.

Davis Tanks and Tower Catalogues.

C. M. Davis & Son, Palatka, Fla., have issued their Catalogue No. 10, which gives full particulars, with prices, concerning their cypress tanks and steel towers. These tanks and towers are installed for private residences, clubs, hotels, etc.; in fact, anywhere that an independent water supply is necessary. The book gives information concerning how these tanks are constructed, and about the kind of wood that is used in building them. Tables of sizes, capacities, etc., and the other data of value to everyone having to do with the installation of these private water-works will be appreciated. There are very many pictures.

Success of Central Georgia Power Company.

The Central Georgia Power Company, Macon, Ga., has published a fine booklet of 27 pages telling all about its history, its progress, its services to the public, etc. Its lines reach out from Macon to Atlanta, Griffin, Hampton, Jackson, Jonesboro, Monticello, Barnesville, Forsyth, Thomaston, Gordon and other points. Attention is directed to the dependable power service that is thus assured and cogent reasons are given as to why industries should locate in middle Georgia. The numerous illustrations afford an impressive idea of what this service means for power, light and transportation. The first of the company's hydro-electric plants, that on the Ocmulgee River, Jackson, Ga., was completed in 1911 and the expansion policy then adopted has been faithfully and energetically pursued, and the organization now operates through the rich sections of the center of the state, serving a territory with 900,000 population.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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THE PROVIDENT SAVINGS BANK & TRUST CO.
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issues city, county and district bonds purchased.

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Birmingham, Ala.

\$5,000,000 Paper Plant at Camden, Ark.

Negotiations have been concluded for the construction of a \$5,000,000 paper and fiber mill at Camden, Ark., by the International Paper Company, New York city. Luther Ellison, secretary of the Camden Chamber of Commerce, wires the MANUFACTURERS RECORD as follows:

"The International Paper Company made selection of Camden, Ark., on December 2, after eight months' careful investigation, as site for new \$5,000,000 Southern plant for manufacture of kraft paper, named the Arkansas Fiber and Paper Company. Will begin construction in January and plan completion of plant in November, 1927. Will be a four-unit mill, employing 700 people and using 400 cords of pine daily. The output will be about 200 tons of paper daily. It will consume 11,000,000 cubic feet of natural gas daily. The electric-power requirements, furnished by the Arkansas Light and Power Company, will amount to \$1,250,000 annually. Hundred-acre site furnished free by the Camden Chamber of Commerce. Will be the largest mill of its kind in the South and the only one in Arkansas."

South Leads in Native Asphalt Production.

Kentucky, in 1925, maintained its rank among the states as the chief producer of native asphalt, with sales of 286,850 short tons of bituminous rock, valued at almost \$2,500,000, according to statistics compiled by the Bureau of Mines. Texas, with 204,530 tons of bituminous rock, was second in quantity, a position that it held in 1923 and 1924. As in 1923 and 1924, Utah was the only state to produce bitumens other than bituminous rock, and sales of 39,520 tons of gilsonite and 270 tons of wurtzilite, valued at \$767,900 and \$18,400, respectively, were reported. An increase in output and in the average value of its products enabled Utah to pass Texas and to resume its rank as second to Kentucky in total value.

Production of bituminous rock, which is used for road building, was reported in 1925 from Alabama, California, Kentucky, Oklahoma and Texas. Missouri, which entered the ranks of the producers in 1924, made no production in 1925. Production and value for the United States in 1925, as measured by sales at the mines, increased 4 and 2 per cent, respectively.

To Connect Gas Fields in Three States.

Charleston, W. Va.—Plans are being formulated by the West Virginia Pipe Line Company, which has been incorporated by William G. Pohl, E. J. McKay and others of the office of H. M. Byllesby & Co., Chicago, for the construction of a pipe line to connect gas fields in Kentucky, West Virginia and Pennsylvania, where the company owns considerable acreage. It is understood that construction work will be done by or through the Byllesby Engineering and Management Corporation of Chicago.

\$1,000,000 Building Planned for Houston.

D. A. Singer of Houston, Texas, wires the MANUFACTURERS RECORD that Joseph Finger of Houston has been engaged as architect for a projected office building, which he plans to erect in that city, and that details will be announced prior to June 1, 1927. It is reported that the structure will cost approximately \$1,000,000.

New Orleans Sells \$1,000,000 School Bonds.

New Orleans, La.—Bonds in the amount of \$1,000,000 for the purchase of sites and erection of school buildings have been sold by the Orleans Parish School Board, A. J. Tete, secretary, to the New Orleans Bank and Trust Company at a premium of \$7999. The bonds will bear an interest rate of 4½ per cent.

Prizes Offered to Southern Commercial Secretaries.

Longview, Texas, December 6—[Special.]—Five cash prizes, totaling \$825, are being offered by Southern firms to those members of the Southern Commercial Secretaries Association obtaining the largest number of new members, based on a percentage quota, for the year which ends at the annual meeting of the association in Chattanooga, Tenn., April 25, 26 and 27, 1927.

There are more than 1500 active chambers of commerce in the 16 Southern states. The object of the Association is to solidify the work of these organizations in a South-wide movement for the advancement of the section.

Prizes offered in the membership contest are distributed as follows:

First prize of \$250, Virginia Bridge and Iron Company, Roanoke; second, \$200, Tennessee Electric Company, Chattanooga; third, \$150, Southern Pine Association, New Orleans; fourth, \$125, Eastern North Carolina, Inc., Queensboro, N. C.; fifth, \$100, the Colossus Company, Shreveport, La. A number of other prizes also have been offered. To stimulate attendance, the L. E. Waterman Company, New York, has offered to present fountain pens to the first 150 secretaries registering at the convention.

The Chattanooga meeting will be the twenty-first annual convention of the Southern Commercial Secretaries Association. W. N. Blanton of Longview, Texas, is president.

Abilene to Vote on \$1,241,000 of Bonds.

Abilene, Texas.—This city will vote December 20 on bonds in the amount of \$1,241,336 for municipal purposes, including the following: Refund outstanding warrants, \$256,336; expansion of water-works, including lake on Cedar Creek, \$600,000; sewers, \$50,000; street improvements, \$50,000; additional bonds for city auditorium, \$60,000; fire station, \$25,000, and schools, \$200,000.

To Acquire Maryland Gas Company.

The Central Public Service Company of Chicago wires the MANUFACTURERS RECORD that it expects to acquire the Cumberland and Allegheny Gas Company, which supplies natural gas from the West Virginia field to territory around Cumberland in western Maryland. It is stated that the purchasing corporation has recently acquired utilities in 15 states and in Canada.

Purchases 960 Acres in Texas Gas Field.

In a letter to the MANUFACTURERS RECORD the Roxana Petroleum Corporation of St. Louis advises that it has purchased 960 acres of land in checkerboard fashion around the Westbrook well, in the central western part of Winkler county, Texas, from Johnson & McCamey of Fort Worth. Plans for the development of the property have not been determined.

Contract for 23-Mile Transmission Line.

The Central Power and Light Company of San Antonio, Texas, advises the MANUFACTURERS RECORD that it has awarded contract to the L. E. Myers Company, Dallas, for construction of a transmission line from Uvalde to Sabinal. The line will be approximately 23 miles in length and work is expected to begin at once.

\$1,000,000 Harbor Improvement Bonds Sold.

Mobile, Ala.—The Alabama State Docks Commission has sold \$1,000,000 bonds for harbor improvement to Caldwell & Co., Nashville, Tenn., and Marx & Co., Birmingham.



A Charming Winter Resort

SEASON:

—
November 20
TO
May 1

Increasing thousands are journeying every year Southward from Northern states. The benefits from a change during the winter months to a genial climate are fully recognized. They mean added years of life and happiness.

The Highland Pines Inn offers rest and recreation. We are flattered by the praise our friends are pleased to give for what they term "unusual hospitality," and we are gratified that they return year after year.

Unsurpassed golf courses and a new clubhouse add to the pleasure of our guests.

*Main Line Seaboard Air Line Railroad with through Pullman service.
Half way between New York and Florida.*

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FLORIDA'S SAFEST INVESTMENT

Shares in its old-established
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Become a member of the Lakeland Building and Loan Association and invest in its capital stock.

**RETURNS 8% WITH
100% SECURITY**

Dividends of 2% are payable, in cash, every three months on full paid shares.

Subject to Supervision and Examination of the Comptroller of the State of Florida.

Lakeland, Florida's highest city; Florida's largest inland city, finest climate and best water in the State; in Polk County, the largest citrus-producing county in the world.

*Let us tell you how you may take advantage
of these facts and increase your income.*

Ask us to send you our booklet.

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**Send in your reservation
for space NOW!
and**

*forward copy to reach us
on or before Dec. 15, 1926.*

In the January 6 issue, which precedes the Good Roads Show to be held in Chicago, the Manufacturers Record will publish a review of the work that has been done in the South and proposed plans for road building and bridge construction for the coming year.

This issue will be in the hands of and read closely by all the leading officials and engineers who have direct charge of the road-building program in the South.

Your advertisement in this issue will bring your product to the direct attention of those who are immediately responsible for purchasing the vast amount of material, equipment and supplies for the South's road-building program.

MANUFACTURERS RECORD

Baltimore

- 0 -

Maryland

**Member: Associated Business Papers, Inc., and
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The Pecan Tree As a Wealth Producer.

On many farms in North Carolina, say horticultural workers at State College, there are from two to three pecan trees which will make fine yields of nuts this fall, and on other farms there are from two to three dozen trees that will give about all the profit received this year from the farm.

According to W. N. Roper, secretary of the North Carolina Pecan Growers' Society, some pecan growers in the state will not have to sacrifice their cotton nor borrow money for taxes and other urgent needs because of the income from their trees.

"Therefore," says Mr. Roper, "growers are advised against waiting until they can make large plantings. Even with pecans as the main crop, such growers would still be in the one-crop class, and so every farmer in eastern Carolina should set out at least a few or a dozen trees this fall."

The Pecan Growers' Society, which has its headquarters at Raleigh, will assist growers in obtaining the best trees and will give information and suggestions on bringing the trees into profitable bearing.

Starting to raise poultry only three years ago, A. M. Smith of Wake county, North Carolina, sold over \$2500 worth of eggs and chickens this year. He has built and paid for three new poultry houses, three new brooder houses, a small hospital house and has 1000 hens and pullets on hand.

Structural-Steel Concern Operating at Tampa.

The F. P. Lyons Iron Works, Inc., of Tampa, in the course of a letter about the establishment of its business interests in that city writes as follows:

"For your information, will advise that we are carrying the largest stock of structural steel for buildings in all of Florida, and have the only modern fabricating plant capable of fabricating from eight to one thousand tons per month. With this capacity we should handle any steel-frame building that might be erected in Florida, and—something that the state has never had before—we can ship in Bethlehem sections, such as columns and girder beams, which always have to be built-up sections of plates and angles, as the excess freight from Bethlehem to Birmingham was so great that it was cheaper to build up sections for delivery in this district. But we now can have Bethlehem material delivered here at a much lower cost than could be shipped into Birmingham, and this is going to be a big advantage for the architects and designers of steel in this district."

Architects for \$1,000,000 Charlotte Hotel.

Charlotte, N. C.—It is announced here that Warren & Wetmore of New York have been engaged as architects for the proposed \$1,000,000 hotel to be erected on the W. S. Pharr property, Providence road, this city, by the Providence Park Hotel Company, Edgar W. Pharr, attorney. The building will contain approximately 200 rooms, and probably will be erected by Dwight P. Robinson & Co., Inc., engineers and contractors, of New York.

PROPOSALS

BOND ISSUES BUILDINGS PAVING GOOD ROADS

Bids close December 16, 1926.

\$3,600,000 4½% Public Improvement Bonds

San Antonio, Texas.
SEALED PROPOSALS, addressed to the undersigned, will be received at this office until 12 o'clock noon on

DECEMBER 16, 1926,
at which place and time they will be opened, for the purchase of \$3,600,000 Public Improvement Bonds issued by the City of San Antonio, Texas, dated January 1, 1927, bearing 4½ per cent interest and maturing serially in annual installments as nearly equal as practicable in from one to forty years.

A certified check or cashier's check in the sum of \$100,000, made payable unconditionally to John W. Tobin, Mayor, must accompany each proposal, and the City of San Antonio reserves the right to reject any and all bids.

Further information may be obtained on application from the undersigned.

FRED FRIES, City Clerk.

San Antonio, Texas.

Bids close December 13, 1926.

\$90,000 4½% Street Improvement Bonds

Thomasville, Ga.
Sealed Proposals will be received by the Mayor and Aldermen of the City of Thomasville, Ga., until December 13, 1926, at 4 P. M., Eastern time, for purchase of \$90,000 4½% City of Thomasville Street Improvement Bonds, being 90 bonds of \$1000 each (certified check for \$3000 must accompany bid), all dated July 1, 1926, with interest coupons maturing semi-annually on the 1st day of January and July of each year, principal and interest payable at the Chase National Bank of the City of New York. Bids should be in a sealed envelope and marked "Bid for Bonds" and addressed to the Clerk of Council, City of Thomasville, Ga. Bids to be considered must be received

RATE: 35 cents per line per insertion.
PUBLICATION DAY: Thursday.
FORMS CLOSE: 4 P. M. Monday.

DAY LETTER: When too late to send copy by mail to reach us by 4 P. M. Monday, forward by day letter.

THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:
Published every business day; gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements.

The same rate applies—35 cents per line per insertion.

at the Clerk's office, City Hall, Thomasville, Ga., not later than 4 P. M., Eastern time, on December 20, 1926. Said bonds to be sold for delivery as of January 1, 1927.

The right is reserved to reject any or all bids.

D. ROY HAY, Mayor.

Attest:
C. C. PITTMAN, Clerk.

Bids close January 6, 1927.

\$800,000 5½% Highway Bonds

Live Oak, Fla.
NOTICE IS HEREBY GIVEN that the Board of County Commissioners of Suwannee County, Florida, will receive sealed bids at the office of the Clerk of the Circuit Court in Live Oak, Florida, on or before the expiration of thirty days from the first publication of this notice, for the sale of those certain bonds, or any part thereof, known and designated as "Suwannee River Scenic Highway Bonds of Suwannee County, Florida, Issue of 1926," of the denomination of \$1000 each, in the aggregate sum of \$800,000, dated July 1, 1926, drawing interest from date at the rate of 5½ per cent

per annum, and payable semi-annually on January 1 and July 1 of each year from date of issuance, and maturing serially as follows:

\$160,000 due ten years from date.
\$160,000 due fifteen years from date.
\$160,000 due twenty years from date.
\$160,000 due twenty-five years from date.
\$160,000 due thirty years from date.

Both the principal and interest are payable at the Hanover National Bank, New York City. Said bonds being voted and issued for the purpose of constructing, paving and hard surfacing Suwannee River Scenic Highway and State Road No. 5-A. Said bonds are validated by a decree of the Circuit Court, and all bids shall be made and accepted subject to the approving opinion of Messrs. Caldwell & Raymond, attorneys, 115 Broadway, New York City, New York, as to the validity of the bonds. The interest coupon maturing January 1, 1927, to be detached and destroyed by the County Commissioners. Each bid shall be addressed to J. W. Bryson, Clerk to the Board of County Commissioners, Live Oak, Florida, and shall be accompanied by a cashier's check, payable to said Clerk, in the sum of \$5000. Said check of the successful bidder to be retained by said Commissioners until said bidder has complied with the terms of his bid. The County Commissioners reserve the right to reject any and all bids. Blanks on which bids are to be made will be furnished free of charge on application to said Clerk. The said Commissioners shall meet at the Court House in Live Oak, Florida, in the office of the Clerk of the Circuit Court, at ten o'clock A. M.,

JANUARY 6, 1927.

for the purpose of opening and considering said bids. The first publication of this notice to be December 7, 1926.

W. L. ROGERS,

Chairman of Board of County Commissioners of Suwannee County, Florida.

J. W. BRYSON,

Clerk to the Board of County Commissioners of Suwannee County, Florida.

Bids close December 28, 1926.

SEALED PROPOSALS will be received by U. S. Veterans Bureau, Room 791, Arlington Building, Washington, D. C., until 11 A. M. December 28, 1926, and then and there publicly opened, for construction of one M. O. C. Quarters and three Duplex Officers' Quarters at U. S. Veterans Hospital No. 60, Oteen, N. C. This work will be for two-story frame buildings with bevel siding and shingle roofs and includes concrete work, metal lathing, plastering, carpentry, insect screens, hardware, painting, glazing, plumbing, heating and electrical work. Proposals will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract, and in making awards the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. At the discretion of the Director, drawings and specifications may be obtained upon application to the Construction Division, Room 791, Arlington Building, Washington, D. C. Deposit with application of check or postal money order for \$20, payable to the TREASURER OF THE UNITED STATES, is required as security for safe return of the drawings and specifications within ten days after date of opening proposals. FRANK T. HINES, Director, November 30, 1926.

Bids close December 15, 1926.

\$371,000 6% Improvement Bonds

Fort Pierce, Fla.

Sealed bids for the purchase of \$371,000 of **LOCAL IMPROVEMENT BONDS**, Series of 1927, of the City of Fort Pierce, Florida, will be received by the City Commission of said city up to the hour of 7.30 P. M. December 15, 1926, at which time said bids will be opened.

Each bid must be securely sealed, addressed to the City Clerk of the City of Fort Pierce, Florida, and plainly marked on the outside of the envelope, "Sealed Bid for Purchase of Improvement Bonds," and the bid shall state in writing the amount the bidder will pay in current funds for said bonds, together with accrued interest from the date of the bonds to the actual date of delivery.

Each bid shall be accompanied by a certified check or cashier's check of some incorporated bank or trust company chartered under the laws of the State of Florida, or of a National Bank, in the sum of not less than 3 per cent of the par value of the bonds, payable to the order of the City of Fort Pierce, and shall not contain any qualified endorsement which would tend to delay or hinder its collection. The sum evidenced by said check shall be forfeited to the City of Fort Pierce in event the bidder fails to comply with the terms of the bid, if the same is accepted and the bonds awarded.

The right is reserved to reject any or all bids.

The said bonds are in denomination of \$1000 each, dated January 1, 1927, with interest at the rate of 6 per cent per annum, interest payable semi-annually, bonds and interest coupons payable at the office of United States Mortgage and Trust Company, New York City. These bonds will mature as follows: Forty-one bonds on January 1st, 1929, and forty-one bonds on January 1st of each year thereafter to and including 1936, and forty-three bonds on January 1st, 1937.

These bonds are issued under the provisions of Chapter 10548 of the Laws of the State of Florida, and are payable from assessments to be levied on the property benefited; and, in event of failure to make or collect such assessments a levy of direct taxation will be made by the City Commission against all taxable property in the city. All of said bonds are general obligations of the City of Fort Pierce.

The said bonds will be validated by decree of Court and their legality will be approved by Thompson, Wood & Hoffman, Attorneys, of New York City.

By order of the City Commission of the City of Fort Pierce, Florida, November 15, 1926.

ELWYN N. MOSES, City Clerk.

Bids close December 15, 1926.

\$48,000 5% Utility Bonds

Fort Pierce, Fla.

Sealed bids for the purchase of \$48,000 of utility bonds of the City of Fort Pierce, Florida, will be received by the City Commission of said City up to the hour of 7.30 P. M. December 15, 1926, at which time said bids will be opened.

Each bid must be securely sealed, addressed to the City Clerk of the City of Fort Pierce, Florida, and plainly marked on the outside of the envelope, "Sealed Bid for Purchase of Utility Bonds," and the bid shall state in writing the amount the bidder will pay in current funds for said bonds, together with accrued interest from the first day of December, 1926, to the actual date of delivery.

Each bid shall be accompanied by a certified check or cashier's check of some incorporated bank or trust company chartered under the laws of the State of Florida or of a national bank, in the sum of not less than three per cent of the par value of the bonds, payable to the order of the City of Fort Pierce, and shall not contain any qualified endorsement which would tend to delay or hinder its collection. The sum evidenced by said check shall be forfeited to the City of Fort Pierce in event the bidder fails to comply with the terms of the bid, if the same is accepted and the bonds awarded.

The right is reserved to reject any or all bids.

The said bonds are in denomination of \$1000 each, dated December 1, 1925, with interest at the rate of 5 per cent per annum, interest payable semi-annually, bonds and interest coupons payable at the office of the United States Mortgage and Trust Co., New York City. These bonds will mature as follows:

Two bonds on December 1, 1927, and two bonds on the first day of December of each year thereafter to and including the year 1950.

These bonds are general obligations of the City of Fort Pierce and were duly voted by the electors of said city. The said bonds were validated by decree of Court and their legality approved by Thompson, Wood & Hoffman, attorneys, of New York City.

By order of the City Commission of the City of Fort Pierce, Florida, November 15, 1926.

ELWYN N. MOSES, City Clerk.

Bids close January 5, 1927.

Bridge Substructure

Fayetteville, W. Va.

SEALED proposals will be received by the County Court of Fayette County, West Virginia, at the Courthouse in Fayetteville until 10 o'clock A. M. on the 5th day of January, 1927, and opened and read immediately thereafter, for the construction of Substructure for Bridge over New River at Stone Cliff, West Virginia.

The approximate quantities are as follows:

2,600 Cubic Yards of Plain and Reinforced Concrete.

2,830 Cubic Yards of Dry, Wet and Rock Excavation.

\$5,530 Pounds Reinforcing Steel.

Proposals will be received only upon standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the County Road Engineer at Fayetteville, West Virginia.

Each proposal must be accompanied by a certified check in the amount of \$4000.

The right is reserved to reject any and all proposals.

THE COUNTY COURT OF FAYETTE
COUNTY, W. VA.

By THOMAS BOONE, Clerk.

Bids close December 15, 1926.

Street Paving

Lake Hamilton, Fla.

Sealed proposals on blank forms (furnished by the Town, addressed to the Mayor and Council, Lake Hamilton, Florida, will be received until 2 P. M. on December 15, 1926, at Lake Hamilton, Florida, for furnishing all materials, equipment and labor for doing the following work:

Approximately 50,000 sq. yds. of street paving, together with all necessary drain-

age, curb and gutter, and other work incidental thereto, as set out in the plans and specifications.

Each bid shall be accompanied by a certified check or satisfactory bidder's bond in the sum of not less than Ten Thousand (\$10,000) Dollars, made payable to the Town Clerk.

Plans and specifications can be seen at the office of the Town Clerk in Lake Hamilton, Florida, or at the office of the Engineers in Leesburg, Florida; Eustis, Florida, or Elberton, Georgia.

Full sets of plans and specifications will be furnished by the Engineers upon payment of Fifteen (\$15) Dollars, half of which will be refunded upon the return of the plans and specifications in good condition within ten days after the date for receiving bids. Specifications may be obtained from the Engineers upon the payment of Two (\$2) Dollars.

The right is reserved to reject any or all bids.

TOWN OF LAKE HAMILTON, FLORIDA.

G. C. SHARER, Mayor.

F. A. WIGHT, Town Clerk.

H. S. JAUDON ENGINEERING

COMPANY, Engineers,

Leesburg, Fla.; Eustis, Fla., and

Elberton, Georgia.

Bids close January 6, 1927.

Street Improvements

Vero Beach, Fla.

Sealed proposals will be received by the City Council of the City of Vero Beach, Florida, at the City Hall until 8 P. M. January 6, 1927, at which time they will be publicly opened and read, for the following work:

67,890 cubic yards sub-grading.

121,835 square yards of water-bound macadam paving with asphalt surface treatment.

60,939 lineal feet of curb and gutter.

3,860 lineal feet of 10-in. storm sewer.

1,040 lineal feet of 12-in. storm sewer.

1,390 lineal feet of 15-in. storm sewer.

2,050 lineal feet of 18-in. storm sewer.

910 lineal feet of 24-in. storm sewer.

770 lineal feet of 30-in. storm sewer.

93 curb inlets and 12 manholes.

The City reserves the right to award the contract for separate bidders on separate sections of the work and to reject any or all bids, and to waive any or all technicalities in awarding the contract.

All bids must be upon the blank forms provided in the Proposal, Specifications and Contract.

Each bid must be accompanied by a certified check for 5% of the amount of the bid, and the Contractor must provide a construction bond for 100% of the amount of his bid.

Plans, specifications and forms of contract and bond may be examined at the office of CARTER & DAMEROW, Inc., Engineers for the City of Vero Beach, Florida, or sets may be obtained from them by making a deposit of twenty-five dollars (\$25), all of which will be refunded upon the return of the plans and specifications in good condition within ten days following the opening of bids.

B. T. REDSTONE, Mayor.

H. G. REDSTONE, Clerk.

Bids close December 13, 1926.

Sanitary Sewer

Clearwater, Fla.

Sealed proposals will be received by the City of Clearwater, Florida, until 7.30 P. M. December 13, 1926, for laying approximately 1000 feet of vitrified clay or concrete 24-inch Sanitary Trunk Line Sewer.

Blank forms of proposal and specifications will be furnished prospective bidders. Plans for the same are on file in the office of the City Manager and City Engineer of said city, where they may be examined.

Certified check of \$500 is required with each bid and bond for 50 per cent of the contract price will be required of the successful bidder, such bond to be with a reputable and responsible surety company as surety, and written by company or companies authorized to do business in the state of Florida.

The city reserves the right to reject any and all bids.

The city reserves the right to increase or decrease the amount of work included in these specifications without affecting in any way the contract prices and without affecting the specifications or contract in any other respect.

CHAS. F. MASON, City Manager.

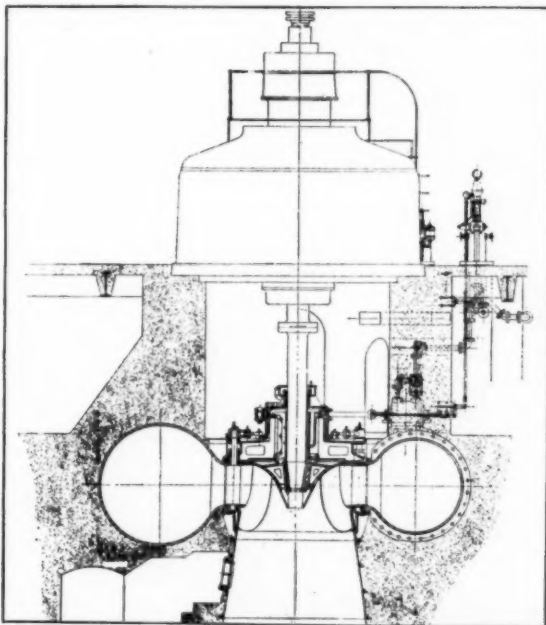
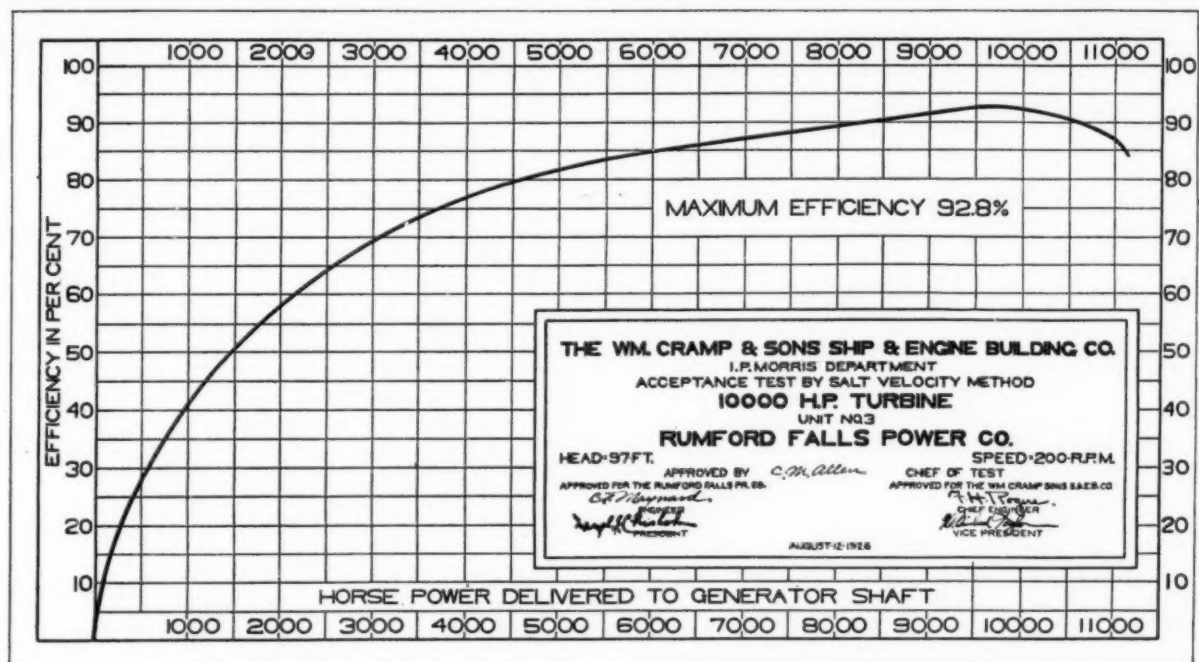
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Rumford, Maine

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92.8% Maximum Efficiency Developed

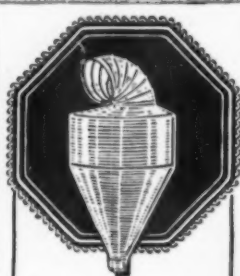
Test conducted by Professor C. M. Allen
using Salt Velocity Method.

Here again is evidenced the results of the careful study given each detail of design, the research work conducted in our experimental laboratory, and the extreme care and precision exercised in our shops to make possible the performance shown above.

In the selection of hydraulic turbine equipment, the purchaser should not direct his main efforts to the securing of minimum first cost, or rely on specifications for best results, but should give chief consideration to the manufacturer's record in completed projects.

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